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Contents

Federal Register

Vol. 66, No. 2

Wednesday, January 3, 2001

Agricultural Marketing Service

RULES

- Cherries (tart) grown in—
Michigan et al., 229–235
- Oranges, grapefruit, tangerines, and tangelos grown in—
Florida and imported, 227–229

NOTICES

- Agency information collection activities:
Proposed collection; comment request, 348
- Beef promotion and research:
Cattlemen's Beef Promotion and Research Board;
certification and nomination, 348–350
- Nonfat dry milk (spray process), instant nonfat dry milk,
and dry buttermilk and dry buttermilk product; grade
standards, 350

Agriculture Department

See Agricultural Marketing Service

See Animal and Plant Health Inspection Service

Animal and Plant Health Inspection Service

RULES

- Animal welfare:
Confiscation of animals, 236–239
- Marine mammals; humane handling, care, treatment, and
transportation, 239–257

Children and Families Administration

NOTICES

- Meetings:
Head Start Research and Evaluation Advisory Committee,
372

Commerce Department

See International Trade Administration

See National Oceanic and Atmospheric Administration

Consumer Product Safety Commission

NOTICES

- Reports and guidance documents; availability, etc.:
Potentially hazardous products distributed outside U.S.;
information reporting; policy statement, 351–352

Defense Department

NOTICES

- Meetings:
Nuclear Weapons Surety Joint Advisory Committee, 352

Education Department

NOTICES

- Agency information collection activities:
Proposed collection; comment request, 352–353
- Grants and cooperative agreements; availability, etc.:
Elementary and secondary education—
21st Century Community Learning Centers Program,
353–355
- Indian education programs—
Native American Vocational and Technical Education
Program, 559–584
- Postsecondary education—
Minority Science and Engineering Improvement
Program, 355–356

Energy Department

See Federal Energy Regulatory Commission

NOTICES

- Grants and cooperative agreements; availability, etc.:
Energy Biosciences Program, 356–357
- Scientific Discovery through Advanced Computing—
Advanced Computational Research in Fusion
Science, 357–361

Environmental Protection Agency

RULES

- Air quality implementation plans; approval and
promulgation; various States:
Connecticut, 633–663
- District of Columbia, Maryland, and Virginia, 585–632
- Massachusetts, 665–694
- Pesticides; tolerances in food, animal feeds, and raw
agricultural commodities:
Clopyralid, 296–298
- Myclobutanil, 298–306

PROPOSED RULES

- Water pollution; effluent guidelines for point source
categories:

Metal products and machinery facilities, 423–558

NOTICES

- Confidential business information and data transfer, 362
- Meetings:
Clean Air Advisory Committee, 362
- Community Right-To-Know toxic chemical release
reporting; stakeholders, 362–364
- Reports and guidance documents; availability, etc.:
Combined Sewer Overflow Control Policy; Water-Quality
Based Provisions, 364–365
- National Hazardous Waste Ombudsman and Regional
Superfund Ombudsman Program, 365–368
- Water pollution control:
Total maximum daily loads—
Mermentau and Vermilion/Teche river basins, LA;
TMDLS required by court order, 368–369
- Water supply:
Public water supply supervision program—
Delaware, 369–370

Executive Office of the President

See Presidential Documents

Federal Aviation Administration

RULES

- Airworthiness directives:
BAe Systems (Operations) Ltd., 267–268
- British Aerospace, 263–265
- Dornier, 265–267
- Airworthiness standards:
Special conditions—
Dessault Aviation Mystere-Falcon 50 airplanes, 261–
263

NOTICES

- Agency information collection activities:
Submission for OMB review; comment request, 392
- Environmental statements; availability, etc.:
Chicago Terminal Airspace Project, IL, 393

Federal Communications Commission**PROPOSED RULES**

Frequency allocations and radio treaty matters:
Software defined radios, 341–345

Federal Emergency Management Agency**NOTICES**

Meetings:
National Urban Search and Rescue Response System
Advisory Committee, 370

Federal Energy Regulatory Commission**NOTICES**

Applications, hearings, determinations, etc.:
Montana Power Co. et al., 361

Federal Reserve System**RULES**

Bank holding companies and change in bank control
(Regulation Y):
Financial holding company requirements; elections by
foreign banks, etc.; and permissible activities, 399–
422
Financial subsidiaries, 257–261

PROPOSED RULES

Bank holding companies and change in bank control
(Regulation Y):
Financial subsidiaries, 307–314

NOTICES

Banks and bank holding companies:
Change in bank control, 370–371
Formations, acquisitions, and mergers, 371
Meetings; Sunshine Act, 371

Federal Retirement Thrift Investment Board**NOTICES**

Meetings; Sunshine Act, 371

Financial Management Service

See Fiscal Service

Fiscal Service**NOTICES**

Reports and guidance documents; availability, etc.:
Federal payments and collections; electronic
authentication policy, 394–397

Fish and Wildlife Service**PROPOSED RULES**

Endangered and threatened species:
Tidewater goby; northern populations, 345–347

Food and Drug Administration**NOTICES**

Agency information collection activities:
Proposed collection; comment request, 372–374
Reporting and recordkeeping requirements, 374
Submission for OMB review; comment request, 374–375
Food additive petitions:
Troy Corp., 375

Health and Human Services Department

See Children and Families Administration

See Food and Drug Administration

See Health Care Financing Administration

NOTICES

Agency information collection activities:
Proposed collection; comment request, 371–372

Health Care Financing Administration**NOTICES**

Grants and cooperative agreements; availability, etc.:
State Children's Health Insurance Program, 375–381

Housing and Urban Development Department**NOTICES**

Agency information collection activities:
Submission for OMB review; comment request, 381
Grants and cooperative agreements; availability, etc.:
Facilities to assist homeless—
Excess and surplus Federal property, 381

Immigration and Naturalization Service**RULES**

Immigration:
Visa waiver pilot program—
Guam; Burma removed, 235–236

Interior Department

See Fish and Wildlife Service

See National Park Service

See Reclamation Bureau

See Surface Mining Reclamation and Enforcement Office

Internal Revenue Service**RULES**

Income taxes:
Credit for increasing research activities, 280–296
Hyperinflationary currency; definition, 279–280
Income subject to separate limitations and affiliated
group interest and other expense allocation and
apportionment and foreign tax credit limitation, 268–
279

PROPOSED RULES

Income taxes:
Income subject to separate limitations and deemed-paid
credit computation, 319–334
Partner's interest basis determination; special rules under
section 705, 315–319

International Trade Administration**NOTICES**

Antidumping:
Fresh garlic from—
China, 350–351

Justice Department

See Immigration and Naturalization Service

NOTICES

Pollution control; consent judgments:
ASARCO, Inc., et al., 387

Medicare Payment Advisory Commission**NOTICES**

Meetings, 387

National Oceanic and Atmospheric Administration**PROPOSED RULES**

Fishery conservation and management:
Northeastern United States fisheries--
Northeast skate; scoping process [Editorial Note: The
entry for this document, published at 66 FR 90 in
the **Federal Register** of January 2, 2001, was
inadvertently omitted from that issue's Table of
Contents.]

National Park Service**NOTICES**

National Register of Historic Places:

Pending nominations, 381–382

National Wild and Scenic Rivers System:

Big and Little Darby Creeks, OH; correction, 382

Reports and guidance documents; availability, etc.:

Federal Land Managers' Air Quality Related Values Work Group; Phase I Report, etc., 382–383

Nuclear Regulatory Commission**NOTICES**

Regulatory guides; issuance, availability, and withdrawal, 390

Applications, hearings, determinations, etc.:

Entergy Nuclear Operations, Inc., 388–390

Presidential Documents**PROCLAMATIONS**

Georgia Republic; extending nondiscriminatory treatment (normal trade relations treatment) to the products of the Republic of Georgia (Proc.7389), 703

EXECUTIVE ORDERS

Government agencies and employees:

Federal Government-university research partnership (EO 13185), 699–702

Senior Presidential appointees; revocation of post-employment restrictions (EO 13184), 695–697

Public Debt Bureau

See Fiscal Service

Public Health Service

See Food and Drug Administration

Railroad Retirement Board**PROPOSED RULES**

Organization, functions, and authority delegations:

Use of agency's seal, 314–315

Reclamation Bureau**NOTICES**

Agency information collection activities:

Proposed collection; comment request, 383–386

Securities and Exchange Commission**NOTICES**

Investment Company Act of 1940:

Exemption applications—

Securities Management & Research, Inc., et al., 390–392

Surface Mining Reclamation and Enforcement Office**PROPOSED RULES**

Permanent program and abandoned mine land reclamation plan submissions:

West Virginia, 335–340

NOTICES

Grants and cooperative agreements; availability, etc.:

Watershed Cooperative Agreement Program, 386–387

Surface Transportation Board**NOTICES**

Railroad services abandonment:

R.J. Corman Railroad Co. et al., 393–394

Thrift Supervision Office**NOTICES**

Agency information collection activities:

Submission for OMB review; comment request, 397

Transportation Department

See Federal Aviation Administration

See Surface Transportation Board

Treasury Department

See Fiscal Service

See Internal Revenue Service

See Thrift Supervision Office

RULES

Financial subsidiaries, 257–261

PROPOSED RULES

Financial subsidiaries, 307–314

Separate Parts In This Issue**Part II**

Federal Reserve System, 399–422

Part III

Environmental Protection Agency, 423–558

Part IV

Department of Education, 559–584

Part V

Environmental Protection Agency, 585–632

Part VI

Environmental Protection Agency, 633–663

Part VII

Environmental Protection Agency, 665–694

Part VIII

The President, 695–697

Part IX

The President, 699–703

Reader Aids

Consult the Reader Aids section at the end of this issue for phone numbers, online resources, finding aids, reminders, and notice of recently enacted public laws.

CFR PARTS AFFECTED IN THIS ISSUE

A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

3 CFR**Executive Orders:**

13184.....697
13185.....701

Proclamations:

7389.....703

7 CFR

905.....227
930 (2 documents)229, 232
944.....227

8 CFR

212.....235

9 CFR

2.....236
3.....239

12 CFR

225 (2 documents)257, 400
1501.....257

Proposed Rules:

225.....307
1501.....307

14 CFR

25.....261
39 (4 documents)263, 264,
265, 267

20 CFR**Proposed Rules:**

369.....314

26 CFR

1 (3 documents)268, 279,
280
602.....280

Proposed Rules:

1 (2 documents)315, 319

30 CFR**Proposed Rules:**

948.....335

40 CFR

52 (3 documents)586, 634,
666
180 (2 documents)296, 298

Proposed Rules:

413.....424
433.....424
438.....424
463.....424
464.....424
467.....424
471.....424

47 CFR**Proposed Rules:**

1.....341
2.....341

50 CFR**Proposed Rules:**

17.....345

Rules and Regulations

Federal Register

Vol. 66, No. 2

Wednesday, January 3, 2001

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Parts 905 and 944

[Docket No. FV99-905-5 FR]

Oranges, Grapefruit, Tangerines, and Tangelos Grown in Florida and Imported Grapefruit; Clarification of Inspection Requirements

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This rule revises inspection requirements for shipments of Florida citrus and imports of grapefruit. The handling of citrus grown in Florida is regulated under a marketing order administered locally by the Citrus Administrative Committee (Committee). Grapefruit imports are subject to an import regulation issued under section 8e of the Agricultural Marketing Agreement Act of 1937. This change specifies in the regulations undersize tolerances for Florida citrus and imported grapefruit that are currently applied by the inspection service and clarifies the regulations. This rule also rennumbers citations in the domestic and import regulations to reflect revisions to the numbering of the United States Standards for Grades of Oranges, Grapefruit, Tangerines, and Tangelos Grown in Florida.

EFFECTIVE DATE: This final rule becomes effective January 4, 2001.

FOR FURTHER INFORMATION CONTACT: William G. Pimental, Marketing Specialist, Southeast Marketing Field Office, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, P.O. Box 2276, Winter Haven, Florida 33883-2276; telephone: (863) 299-4770, Fax: (863) 299-5169; or George Kelhart, Technical Advisor, Marketing Order Administration Branch, Fruit and Vegetable Programs,

AMS, USDA, room 2525-S, P.O. Box 96456, Washington, DC 20090-6456; telephone: (202) 720-2491, Fax: (202) 720-5698.

Small businesses may request information on complying with this regulation by contacting Jay Guerber, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, P.O. Box 96456, room 2525-S, Washington, DC 20090-6456; telephone (202) 720-2491, Fax: (202) 720-5698, or E-mail: Jay.Guerber@usda.gov.

SUPPLEMENTARY INFORMATION: This final rule is issued under Marketing Agreement No. 84 and Marketing Order No. 905, both as amended (7 CFR Part 905), regulating the handling of oranges, grapefruit, tangerines, and tangelos grown in Florida, hereinafter referred to as the "order." The marketing agreement and order are effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), hereinafter referred to as the "Act."

This final rule is also issued under section 8e of the Act, which provides that whenever certain specified commodities, including grapefruit, are regulated under a Federal marketing order, imports of these commodities into the United States are prohibited unless they meet the same or comparable grade, size, quality, or maturity requirements as those in effect for the domestically produced commodities.

The Department of Agriculture (Department) is issuing this rule in conformance with Executive Order 12866.

This final rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule is not intended to have retroactive effect. This rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the Act, any handler subject to an order may file with the Secretary a petition stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with law and request a modification of the order or to be exempted therefrom. A

handler is afforded the opportunity for a hearing on the petition. After the hearing the Secretary would rule on the petition. The Act provides that the district court of the United States in any district in which the handler is an inhabitant, or has his or her principal place of business, has jurisdiction to review the Secretary's ruling on the petition, provided an action is filed not later than 20 days after the date of the entry of the ruling.

There are no administrative procedures which must be exhausted prior to any judicial challenge to the provisions of import regulations issued under section 8e of the Act.

The order for Florida citrus provides for the establishment of minimum grade and size requirements with the concurrence of the Secretary. The minimum grade and size requirements are designed to provide fresh markets with fruit of acceptable quality and size, thereby maintaining consumer confidence for fresh Florida citrus. Maintaining confidence in the commodity shipped contributes to stable marketing conditions in the interest of growers, handlers, and consumers, and helps increase returns to Florida citrus growers.

Section 905.52 of the order, in part, authorizes the Committee to recommend minimum grade and size requirements to the Secretary. Section 905.306 specifies minimum grade and size requirements for different varieties of fresh Florida citrus. Such regulations may be modified, suspended, or terminated under § 905.52. Section 905.53 specifies that whenever the handling of a variety of a type of fruit is regulated pursuant to § 905.52, each handler who handles any such type of fruit shall, prior to such handling of any lot of such variety, cause the lot to be inspected by the Federal-State Inspection Service and certified as meeting all applicable requirements of that regulation.

This final rule clarifies inspection requirements for oranges, grapefruit, tangerines, and tangelos grown in Florida and imported grapefruit. Current inspection procedures allow undersize tolerances for domestic shipments of Florida citrus failing to meet minimum size regulations under the order. These procedures also allow undersize tolerances for imported grapefruit failing to meet minimum size

requirements established under the grapefruit import regulation. Specifically, these procedures allow for a 10 percent tolerance for undersize fruit in each lot and a 15 percent tolerance for undersize fruit in any individual sample. Undersize tolerances allow for variations to proper sizing and reduce handler-packing costs. This rule specifies these inspection procedures in the order's rules and regulations and in the grapefruit import regulation. The Committee unanimously recommended specifying the undersize tolerances for Florida citrus in the regulations at a meeting on April 6, 1999.

Paragraph (c) of § 905.306 currently references sections of the United States Standards for Grades of Oranges, Grapefruit, Tangerines, and Tangelos Grown in Florida with the intention of providing tolerances for undersized fruit. However, the sections specified reference grade defects, not size tolerances. Therefore, specific undersize tolerances for Florida grown oranges, grapefruit, tangerines, and tangelos are added to the text of the regulations.

Paragraph (c) of § 905.306 is revised to allow for a 10 percent tolerance for undersized fruit in each lot and a 15 percent tolerance for undersized fruit in any individual sample. Additionally, paragraph (c) of § 944.106 of the grapefruit import regulation is also revised to reference the undersize tolerances specified in paragraph (c) of § 905.306 to recognize current inspection procedures.

This rule also renumbers citations in the order to reflect the revised United States Standards for Grades of Oranges, Grapefruit, Tangerines, and Tangelos Grown in Florida. Effective August 1, 1996, the various grade standards for Florida citrus were amended. Some sections of the amended standards were renumbered. This action renumbers some section references to the U.S. grade standards in §§ 905.146 and 905.306 to bring them into conformity with the renumbered sections in the amended standards.

Similar changes are also made in paragraph (c) of § 944.106 of the grapefruit import regulation issued under section 8e of the Act. That section provides that when certain domestically produced commodities, including grapefruit, are regulated under a Federal marketing order, imports of that commodity must meet the same or comparable grade, size, quality, and maturity requirements. The grapefruit import regulation is based on the requirements issued under the marketing order for Florida citrus. Accordingly, a corresponding change to the grapefruit import regulation is made.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the AMS has considered the economic impact of this action on small entities. Accordingly, AMS has prepared this final regulatory flexibility analysis.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and the rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility. Import regulations issued under the Act are based on those established under Federal marketing orders.

There are approximately 100 Florida citrus handlers subject to regulation under the marketing order, about 11,000 Florida citrus producers in the regulated area, and about 25 grapefruit importers. Small agricultural service firms, which include handlers and importers, have been defined by the Small Business Administration (13 CFR 121.201) as those whose annual receipts are less than \$5,000,000, and small agricultural producers are defined as those whose annual receipts are less than \$500,000.

Based on the Florida Agricultural Statistics Service and Committee data for the 1999–2000 season, the average annual f.o.b. price for fresh Florida citrus during the 1999–2000 season was \$9.08 per $\frac{1}{8}$ bushel carton for all shipments, and the total shipments for the 1999–2000 season approximated 58 million cartons of citrus. Using information provided by the Committee, about 60 percent of citrus handlers could be considered small businesses under the SBA definition, and the Department believes that the majority of Florida citrus producers and grapefruit importers may be classified as small entities.

Section 905.52 of the order, in part, authorizes the Committee to recommend minimum grade and size requirements to the Secretary. Section 905.306 specifies minimum grade and size requirements for different varieties of fresh Florida citrus. Section 905.53 specifies that whenever the handling of a variety of a type of fruit is regulated pursuant to § 905.52, each handler who handles any such type of fruit shall, prior to such handling of any lot of such variety, cause the lot to be inspected by the Federal-State Inspection Service and certified as meeting all applicable requirements of that regulation.

This rule clarifies inspection requirements for oranges, grapefruit,

tangerines, and tangelos grown in Florida and imported grapefruit. Current inspection procedures allow for a 10 percent tolerance for undersize fruit in each lot and a 15 percent tolerance for undersize fruit in any individual sample for both domestic and import shipments. This action adds undersize tolerances to the order's rules and regulations and the import regulation for grapefruit. This rule also renumbers citations in the order to reflect revisions in the United States Standards for Grades of Oranges, Grapefruit, Tangerines, and Tangelos Grown in Florida made in August 1996. Similar changes are also made to the grapefruit import regulation issued under section 8e of the Act.

This rule will have a positive impact on affected entities. This action enhances the understandability of the text of the regulations. The undersize tolerances allow for variations to proper sizing and reduce handler-packing costs. Without such tolerances, more fruit would fail to meet minimum size requirements without reconditioning, and handler-packing costs would increase accordingly. Thus, the tolerances help facilitate shipments of Florida citrus. The Committee unanimously recommended specifying the undersize tolerances for Florida citrus in the regulations at a meeting on April 6, 1999.

During the period January 1, 1999, through December 31, 1999, imports of grapefruit totaled 19,400,000 pounds (approximately 456,470 cartons). Recent yearly data indicate that imports from May through November are typically negligible. Future imports should not vary significantly from the 19,400,000 pounds. The Bahamas were the principal source of imported grapefruit, accounting for 93 percent of the total. Israel, Mexico, and Turkey supplied remaining imports. Most imported grapefruit enters the United States from November through May.

With regard to alternatives, this action offers the best alternative to achieve the intended purpose of clarifying the inspection requirements.

This rule will not impose any additional reporting or recordkeeping requirements on either small or large Florida citrus handlers and importers. As with all Federal marketing order programs, reports and forms are periodically reviewed to reduce information requirements and duplication by industry and public sectors.

As noted in the initial regulatory flexibility analysis, the Department has not identified any relevant Federal rules that duplicate, overlap or conflict with

this final rule. However, Florida citrus must meet the requirements specified in the U.S. standards for the various types of citrus grown in Florida issued under the Agricultural Marketing Act of 1946 (7 U.S.C. 1621 through 1627).

In addition, the Committee's meeting was widely publicized throughout the Florida citrus industry and all interested persons were invited to attend the meeting and participate in Committee deliberations. Like all Committee meetings, the April 6, 1999, meeting was a public meeting and all entities, both large and small, were able to express their views on this issue.

A proposed rule concerning this action was published in the **Federal Register** on October 10, 2000 (65 FR 60121). Copies of the rule were mailed or sent via facsimile to all Committee members and citrus handlers. Finally, the rule was made available through the Internet by the Office of the Federal Register. A 60-day comment period ending December 11, 2000, was provided to allow interested persons to respond to the proposed rule. No comments were received. Accordingly, no changes will be made to the rule as proposed.

A small business guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders may be viewed at: <http://www.ams.usda.gov/fv/moab.html>. Any questions about the compliance guide should be sent to Jay Guerber at the previously mentioned address in the **FOR FURTHER INFORMATION CONTACT** section.

In accordance with section 8e of the Act, the United States Trade Representative has concurred with the issuance of this final rule.

After consideration of all relevant matter presented, including the information and recommendation submitted by the Committee and other available information, it is hereby found that this rule, as hereinafter set forth, will tend to effectuate the declared policy of the Act.

It is further found that good cause exists for not postponing the effective date of this rule until 30 days after publication in the **Federal Register** (5 U.S.C. 553) because handlers are already shipping citrus from the 2000–2001 crop. Further, handlers are aware of this rule, which was recommended at a public meeting. Also, a 60-day comment period was provided for in the proposed rule and no comments were received.

List of Subjects

7 CFR Part 905

Grapefruit, Marketing agreements, Oranges, Reporting and recordkeeping requirements, Tangelos, Tangerines.

7 CFR Part 944

Avocados, Food grades and standards, Grapefruit, Grapes, Imports, Kiwifruit, Limes, Olives, Oranges.

For the reasons set forth above, 7 CFR Parts 905 and 944 are amended as follows:

PART 905—ORANGES, GRAPEFRUIT, TANGERINES, AND TANGELOS GROWN IN FLORIDA

1. The authority citation for 7 CFR Parts 905 and 944 continues to read as follows:

Authority: 7 U.S.C. 601–674.

2. In § 905.146, paragraph (c)(1) is revised to read as follows:

§ 905.146 Special purpose shipments.

* * * * *

(c) * * *

(1) Such fruit meets the requirements of U. S. No. 2 Russet grade and those requirements of U. S. No. 1 grade relating to shape (form), as such requirements are set forth in the revised U. S. Standards for Grades of Florida Oranges and Tangelos (7 CFR 51.1140 through 51.1179), the revised Standards for Florida Tangerines (7 CFR 51.1810 through 51.1837), or the revised U. S. Standards for Grades of Florida Grapefruit (7 CFR 51.750 through 51.784). Such fruit also meets applicable minimum size requirements in effect for domestic shipments of citrus fruits.

* * * * *

4. In § 905.306, paragraphs (c) and (d) are revised to read as follows:

§ 905.306 Orange, Grapefruit, Tangerine and Tangelo Regulation.

* * * * *

(c) *Size tolerances.* To allow for variations incident to proper sizing in the determination of minimum diameters as prescribed in Tables I and II, not more than 10 percent, by count, of the fruit in any lot of containers may fail to meet the minimum diameter size requirements, and not more than 15 percent, by count, in any individual sample may fail to meet the minimum diameter size requirements specified: *Provided*, That such tolerances for other than Navel and Temple oranges shall be based only on the oranges in the lot measuring $2\frac{1}{16}$ inches or smaller in diameter.

(d) Terms used in the marketing order including Improved No. 2 grade for

grapefruit, when used herein, mean the same as is given to the terms in the order; Florida No. 1 grade for Honey tangerines means the same as provided in Rule No. 20–35.03 of the Regulations of the Florida Department of Citrus, and terms relating to grade, except Improved No. 2 grade for grapefruit and diameter, shall mean the same as is given to the terms in the revised U. S. Standards for Grades of Florida Oranges and Tangelos (7 CFR 51.1140 through 51.1179), the revised U. S. Standards for Florida Tangerines (7 CFR 51.1810 through 51.1837), or the revised U. S. Standards for Grades of Florida Grapefruit (7 CFR 51.750 through 51.784).

PART 944—FRUITS; IMPORT REGULATIONS

5. In § 944.106, paragraph (c) is revised to read as follows:

§ 944.106 Grapefruit import regulation.

* * * * *

(c) Terms and tolerances pertaining to grade and size requirements, which are defined in the United States Standards for Grades of Florida Grapefruit (7 CFR 51.750–51.784), and in Marketing Order No. 905 (7 CFR §§ 905.18 and 905.306), shall be applicable herein.

* * * * *

Dated: December 27, 2000.

Robert C. Keeney,

Deputy Administrator, Fruit and Vegetable Programs.

[FR Doc. 01–97 Filed 1–2–01; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 930

[Docket No. FV00–930–6 IFR]

Tart Cherries Grown in the States of Michigan, et al.; Suspension of Provisions under the Federal Marketing Order for Tart Cherries

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Interim final rule with request for comments.

SUMMARY: This rule suspends indefinitely a portion of an order provision concerning the release of reserve cherries. The suspension will allow cherries held in inventory reserves to be released for exempt uses such as exports. The Cherry Industry Administrative Board (Board) recommended this action to allow reserve cherries to be used in outlets

other than normal commercial outlets. The Board is responsible for local administration of the marketing order which regulates the handling of tart cherries grown in the production area.

DATES: Effective January 4, 2001.

Comments received by March 5, 2001, will be considered prior to issuance of a final rule.

ADDRESSES: Interested persons are invited to submit written comments concerning this rule. Comments must be sent to the Docket Clerk, Fruit and Vegetable Programs, AMS, USDA, room 2525-S, P.O. Box 96456, Washington, DC 20090-6456; Fax: (202) 720-5698; or E-mail: moab.docketclerk@usda.gov. Comments should reference the docket number and the date and page number of this issue of the **Federal Register** and will be available for public inspection in the Office of the Docket Clerk during regular business hours.

FOR FURTHER INFORMATION CONTACT:

Patricia A. Petrella or Kenneth G. Johnson, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, Suite 2A04, Unit 155, 4700 River Road, Riverdale, Maryland 20737, telephone: (301) 734-5243, Fax: (301) 734-5275 or George Kelhart, Technical Advisor, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, room 2525-S, P.O. Box 96456, Washington, DC 20090-6456; telephone: (202) 720-2491, Fax: (202) 720-5698.

Small businesses may request information on compliance with this regulation, or obtain a guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders by contacting Jay Guerber, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, P.O. Box 96456, room 2525-S, Washington, DC 20090-6456; telephone (202) 720-2491; Fax: (202) 720-5698, or E-mail: Jay.Guerber@usda.gov.

SUPPLEMENTARY INFORMATION: This rule is issued under Marketing Agreement and Order No. 930, both as amended (7 CFR part 930), regulating the handling of tart cherries grown in the States of Michigan, New York, Pennsylvania, Oregon, Utah, Washington, and Wisconsin, hereinafter referred to as the "order." The marketing agreement and order are effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), hereinafter referred to as the "Act."

The Department of Agriculture (Department) is issuing this rule in conformance with Executive Order 12866.

This rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule is not intended to have retroactive effect. This rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the Act, any handler subject to an order may file with the Secretary a petition stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with law and request a modification of the order or to be exempted therefrom. Such handler is afforded the opportunity for a hearing on the petition. After the hearing the Secretary would rule on the petition. The Act provides that the district court of the United States in any district in which the handler is an inhabitant, or has his or her principal place of business, has jurisdiction to review the Secretary's ruling on the petition, provided an action is filed not later than 20 days after the date of the entry of the ruling.

The order authorizes the use of volume regulation. In years when volume regulation is implemented to stabilize supplies, a certain percentage of the cherry crop is required to be set aside as restricted tonnage, and the balance may be marketed freely as free tonnage. The restricted tonnage is required to be maintained in handler-owned inventory reserve pools. Handlers in volume regulated States may fulfill their restricted tonnage requirements with diversion credits earned by diverting cherries or cherry products. Handlers are permitted to divert (at plant or with grower-diversion certificates from growers choosing not to deliver their crop) as much of their restricted percentage (reserve pool) requirements as they deem appropriate. Handlers also may divert cherries by using cherries or cherry products for exempt purposes, including the development of export markets. Presently, these markets do not include Canada and Mexico.

Section 930.62 of the order (Exemptions) provides that cherries which are diverted in accordance with § 930.59, which are used for new product and new market development, which are used for experimental purposes, or which are used for any other purposes designated by the Board, including cherries processed into products for markets for which less than 5 percent of the preceding 5-year average production of cherries was

utilized, may be exempted from the assessment, quality control, volume regulation, and reserve provisions of the order.

Handlers can receive exemptions and diversion credits to offset their restricted percentage obligation during years of volume regulation. One of the exempt uses is the export of cherries to markets other than Canada and Mexico. Cherries used for exempt uses, including export, are exempt from assessments, and handlers pay growers less for such cherries than cherries for normal commercial outlets. This lowers handlers' costs and allows them to price export cherries competitively.

The Board held a teleconference meeting on June 1, 2000, and recommended that the word "normal" be suspended from § 930.54(a) of the order. Currently, that section of the order provides that if the Board determines that the total available supplies for use in normal commercial outlets do not at least equal the amount needed to meet the demand in such outlets, the Board shall recommend to the Secretary that all or a portion of the reserve be released for such uses. Normal commercial outlets, as that term is used in the order, means the primary market which is mainly the domestic market for tart cherries. Therefore, under § 930.54(a), reserve release could not be used to fulfill exempt needs.

During the 1999-2000 crop year when no volume regulation was established, the Board found that the export market was not adequately supplied due to short supplies of tart cherries, but could not make reserve cherries from the previous season available to meet export needs because export markets were not considered normal commercial outlets. Because of this limitation, the industry was not able to maintain a presence in many export markets, or further develop others. Export sales are a function of many different factors, including the size of the crop in Europe, the size of the U.S. crop, and the strength of the U.S. dollar.

Exports need to be sustained each year, whether or not volume control is implemented. It is important for buyers of tart cherries to know that product will be available from year to year from sources in the United States. The Board believes that failure to properly supply these markets will result in lost market share. In years with no volume regulation, growers and handlers have little economic incentive to move tart cherries or tart cherry products to the lower return markets, like export. In such years, growers seek to maximize profits by selling in the higher return "free" domestic market. Consequently,

market opportunities are lost in the short term and quite possibly the long term. Development of export markets is important to the long term viability of the tart cherry industry.

This rule suspends indefinitely a portion of § 930.54 of the order to allow the release of reserve cherries for exempt uses such as exports. This will encourage handlers to purchase additional cherries from growers at lower prices in years of volume regulation for placement in the reserve during harvest for future export use, rather than having the grower divert them in the orchard. Thus, additional lower-priced cherries would be available in a year of no regulation to continuously supply the export market. This will enable the industry to maintain market share in these markets in volume and non-volume regulated seasons, which is important in developing and maintaining these markets.

In non-volume regulated years, when expected supplies and primary market needs are closely aligned, lower-priced supplies are not available for export. This action will provide the industry with a means of maintaining exports by allowing lower-priced reserves from a previous season or seasons to be used for this purpose.

The Regulatory Flexibility Act and Effects on Small Businesses

The Agricultural Marketing Service (AMS) has considered the economic impact of this action on small entities and has prepared this initial regulatory flexibility analysis. The Regulatory Flexibility Act (RFA) would allow AMS to certify that regulations do not have a significant economic impact on a substantial number of small entities. However, as a matter of general policy, AMS' Fruit and Vegetable Programs (Programs) no longer opt for such certification, but rather performs regulatory flexibility analyses for any rulemaking that would generate the interest of a significant number of small entities. Performing such analyses shifts the Programs' efforts from determining whether regulatory flexibility analyses are required to the consideration of regulatory options and economic or regulatory impacts.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and rules thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both

statutes have small entity orientation and compatibility.

There are approximately 900 producers of tart cherries in the production area and approximately 40 handlers subject to regulation under the marketing order. Small agricultural producers have been defined by the Small Business Administration (13 CFR 121.201) as those having annual receipts less than \$500,000, and small agricultural service firms are defined as those whose annual receipts are less than \$5,000,000. The majority of tart cherry producers and handlers may be classified as small entities.

Data from the National Agricultural Statistics Service (NASS) states that for 1999, tart cherry utilization for juice, wine, or brined uses was 34.5 million pounds for all districts covered under the order. The total processed amount for 1999 was 252.3 million pounds. Juice, wine, and brined tart cherries represented about 14 percent of the total processed crop, and about 10 percent over the last three seasons (1997 through 1999).

This rule will allow markets that have been developed and sustained by the use of the exemption and diversion provisions of the order in years of volume regulation to be sustained in years with no volume regulation. In the long run, market growth for tart cherry products will be increased, grower returns will be improved, and less fruit will be abandoned in the orchard by growers. Handlers will have an incentive to put cherries in the reserve to supply the export market in years of no regulation, and therefore, not as many growers will have to in-orchard divert.

All businesses, whether large or small, will benefit from this suspension action through increased sales during years of no regulation because they will be able to continue to supply the export markets. In years of volume regulation, handlers tend to put more cherries in reserve instead of diverting them because they expect to use those cherries during periods of short supply to assure a continuous supply of cherries. Currently, those cherries can only be released for normal commercial outlets; i.e., the domestic market. This action will allow the reserve cherries to be released for export, as well as the domestic market, when needed.

During the 1999–2000 crop year, when no volume regulation was established, the Board found that the export market was not adequately supplied, but could not make lower-valued reserve cherries from the previous season available to meet export needs because export markets were not

considered normal commercial outlets. Export sales are a function of many different factors, including the size of the crop in Europe, the size of the U.S. crop and the strength of the U.S. dollar.

The industry recognizes, however, that exports need to be sustained each year, whether or not volume control is implemented. It is important for buyers of tart cherries to know that product will be available from year to year from sources in the United States. The Board believes that failure to properly supply these markets from year to year will result in lost market share, which is not conducive to further strengthening the industry.

This rule suspends indefinitely a portion of § 930.54 of the order to allow the release of reserve cherries for exempt uses such as exports. This will provide the industry with flexibility to meet market needs in domestic and export outlets from year to year which is in the interest of growers and handlers, whether small or large. Market development and expansion is important to the long-term strength of the industry.

One alternative to this action would be to continue the status quo. However, this would not be favorable to cherry growers and handlers and could delay the long-term development of export markets.

This action imposes no additional reporting or recordkeeping requirements on either small or large tart cherry handlers. As with all Federal marketing order programs, reports and forms are periodically reviewed to reduce information requirements and duplication by industry and public sector agencies. In addition, the Department has not identified any relevant Federal rules that duplicate, overlap, or conflict with this rule.

In compliance with Office of Management and Budget (OMB) regulations (5 CFR Part 1320) which implement the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the information collection and recordkeeping requirements imposed by this order have been previously approved by OMB and assigned OMB Number 0581–0177.

The Board's telephone meeting was publicized and all Board members and alternate Board members, representing both large and small entities, were invited to attend the meeting and participate in Board deliberations. The Board itself is composed of 18 members, of which 17 members are growers and handlers and one represents the public. Also, the Board has a number of appointed committees to review certain issues and make recommendations.

Finally, interested persons are invited to submit information on the regulatory and informational impacts of this action on small businesses.

A small business guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders may be viewed at the following website: <http://www.ams.usda.gov/fv/moab.html>. Any questions about the compliance guide should be sent to Jay Guerber at the previously mentioned address in the **FOR FURTHER INFORMATION CONTACT** section.

This rule invites comments on suspending the word "normal" in § 930.54(a) to allow the release of inventory reserve cherries into exempt use outlets such as exports. All comments received will be considered in finalizing this interim final rule.

After consideration of all relevant material presented, including the information and recommendation submitted by the Board and other available information, it is hereby found that the word "normal" in § 930.54(a) no longer tends to effectuate the declared policy of the Act and should be indefinitely suspended.

Pursuant to 5 U.S.C. 553, it is also found and determined upon good cause that it is impracticable, unnecessary, and contrary to the public interest to give preliminary notice prior to putting this rule into effect, and that good cause exists for not postponing the effective date of this rule until 30 days after publication in the **Federal Register** because: (1) The 2000–2001 fiscal period began July 1, 2000, and this rule needs to be effective as soon as possible in order to allow the industry to take advantage of the expanded inventory release; and (2) this interim final rule provides a 60-day comment period, and all comments timely received will be considered prior to finalization of this rule.

List of Subjects in 7 CFR Part 930

Marketing agreements, Reporting and recordkeeping requirements, Tart cherries.

For the reasons set forth in the preamble, 7 CFR part 930 is amended as follows:

PART 930—TART CHERRIES GROWN IN THE STATES OF MICHIGAN, NEW YORK, PENNSYLVANIA, OREGON, UTAH, WASHINGTON, AND WISCONSIN

1. The authority citation for 7 CFR part 930 continues to read as follows:

Authority: 7 U.S.C. 601–674.

930.54 [Suspended in part]

2. In § 930.54(a), the word "normal" is suspended indefinitely.

Dated: December 27, 2000.

Robert C. Keeney,

Deputy Administrator, Fruit and Vegetable Programs.

[FR Doc. 01–96 Filed 1–2–01; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 930

[Docket No. FV01–930–1 IFR]

Tart Cherries Grown in the States of Michigan, et al.; Decreased Assessment Rates

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Interim final rule with request for comments.

SUMMARY: This rule decreases the assessment rate for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate, or puree from \$0.0017 to \$0.0012 per pound. It also decreases the assessment rate for cherries utilized for juice, juice concentrate, or puree from \$0.00085 to \$0.0006 per pound. Both assessment rates were recommended by the Cherry Industry Administrative Board (Board) under Marketing Order No. 930 for the 2000–2001 and subsequent fiscal periods. The Board is responsible for local administration of the marketing order which regulates the handling of tart cherries grown in the production area. Authorization to assess tart cherry handlers enables the Board to incur expenses that are reasonable and necessary to administer the program. The fiscal period began July 1 and ends June 30. The assessment rates will remain in effect indefinitely unless modified, suspended, or terminated.

DATES: Effective January 4, 2001. Comments received by March 5, 2001, will be considered prior to issuance of a final rule.

ADDRESSES: Interested persons are invited to submit written comments concerning this rule. Comments must be sent to the Docket Clerk, Fruit and Vegetable Programs, AMS, USDA, room 2525–S, P.O. Box 96456, Washington, DC 20090–6456; Fax: (202) 720–5698; or E-mail: moab.docketclerk@usda.gov. Comments should reference the docket number and the date and page number of this issue of the **Federal Register** and will be available for public inspection in

the Office of the Docket Clerk during regular business hours, or can be viewed at: <http://www.ams.usda.gov/fv/moab.html>.

FOR FURTHER INFORMATION CONTACT:

Patricia A. Petrella or Kenneth G. Johnson, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, Suite 2A04, Unit 155, 4700 River Road, Riverdale, MD 20737, telephone: (301) 734–5243, Fax: (301) 734–5275; or George Kelhart, Technical Advisor, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, room 2525–S, P.O. Box 96456, Washington, DC 20090–6456; telephone: (202) 720–2491, Fax: (202) 720–5698.

Small businesses may request information on complying with this regulation, or obtain a guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders by contacting Jay Guerber, Marketing Order Administration Branch, Fruit and Vegetable Programs, AMS, USDA, P.O. Box 96456, room 2525–S, Washington, DC 20090–6456; telephone (202) 720–2491, Fax: (202) 720–5698, or E-mail: Jay.Guerber@usda.gov.

SUPPLEMENTARY INFORMATION: This rule is issued under Marketing Agreement and Order No. 930 (7 CFR part 930), regulating the handling of tart cherries grown in the States of Michigan, New York, Pennsylvania, Oregon, Utah, Washington, and Wisconsin, hereinafter referred to as the "order." The marketing agreement and order are effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674), hereinafter referred to as the "Act."

The Department of Agriculture (Department) is issuing this rule in conformance with Executive Order 12866.

This rule has been reviewed under Executive Order 12988, Civil Justice Reform. Under the marketing order now in effect, tart cherry handlers are subject to assessments. Funds to administer the order are derived from such assessments. It is intended that the assessment rates as issued herein will be applicable to all assessable tart cherries beginning July 1, 2000, and continue until amended, suspended, or terminated. This rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the Act, any

handler subject to an order may file with the Secretary a petition stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with law and request a modification of the order or to be exempted therefrom. Such handler is afforded the opportunity for a hearing on the petition. After the hearing the Secretary would rule on the petition. The Act provides that the district court of the United States in any district in which the handler is an inhabitant, or has his or her principal place of business, has jurisdiction to review the Secretary's ruling on the petition, provided an action is filed not later than 20 days after the date of the entry of the ruling.

This rule decreases the assessment rate established for the Board for the 2000–2001 and subsequent fiscal periods for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate, or puree from \$0.0017 to \$0.0012 per pound of cherries. The assessment rate for cherries utilized for juice, juice concentrate, or puree is decreased from \$0.00085 to \$0.0006 per pound.

The tart cherry marketing order provides authority for the Board, with the approval of the Department, to formulate an annual budget of expenses and collect assessments from handlers to administer the program. The members of the Board are producers and handlers of tart cherries. They are familiar with the Board's needs and with the costs for goods and services in their local area and are thus in a position to formulate an appropriate budget and assessment rates. The assessment rates are formulated and discussed in a public meeting. Thus, all directly affected persons have an opportunity to participate and provide input.

For the 2000–2001 fiscal period, the Board recommended, and the Department approved, assessment rates that would continue in effect from fiscal period to fiscal period unless modified, suspended, or terminated by the Secretary upon recommendation and information submitted by the Board or other information available to the Secretary.

The Board met on March 2, 2000, and unanimously recommended, and the Department approved, 2000–2001 expenditures of \$455,000 and assessment rate decreases from \$0.00225 to \$0.0017 per pound for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate, or puree and from \$0.001125 to \$0.00085 per pound for

cherries utilized for juice, juice concentrate, or puree.

The Board met again on September 8, 2000, and unanimously recommended a further decrease in the assessment rates to \$0.0012 per pound for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate, or puree, and to \$0.0006 per pound for cherries utilized for juice, juice concentrate, or puree. Further decreased assessment rates have been recommended by the Board because the cherry industry has experienced record high crops for the past two seasons and again this season. In addition, the Board wants to further reduce handler costs while maintaining a monetary reserve which is adequate to cover approximately six months' operational expenses (based on an annual operating budget of approximately \$455,000). Section 930.42(a) of the order authorizes a reserve sufficient to cover one year's operating expenses. The decreased rates are expected to generate enough income to meet the Board's reduced operating expenses in 2000–2001.

The order provides that when an assessment rate based on the number of pounds of tart cherries handled is established, it should provide for differences in relative market values for various cherry products. The discussion of this provision in the order's promulgation record indicates that proponents testified that cherries utilized in high value products such as frozen, canned, or dried cherries should be assessed one rate while cherries used to make low value products such as juice concentrate or puree should be assessed at one-half that rate.

Data from the National Agricultural Statistics Service (NASS) states that for 1999, tart cherry utilization for juice, wine, or brined uses was 34.5 million pounds for all districts covered under the order. The total processed amount of tart cherries for 1999 was 252.3 million pounds. Juice, wine, and brined tart cherries represented less than 14 percent of the total processed crop, and about 10 percent over the last three seasons (1996 through 1998).

In deriving the recommended assessment rates, the Board determined assessable tart cherry production for the crop year at 280 million pounds. It further estimated that about 265 million pounds of the assessable poundage would be utilized in the production of high-valued products, like frozen, canned, or dried cherries, and that about 15 million pounds would be utilized in the production of low-valued products, like juice, juice concentrate, or puree. Potential assessment income from the high valued products would be

approximately \$318,000 (265 million pounds X \$0.0012 per pound). The potential income from tart cherries utilized for juice, juice concentrate, or puree would be \$9,000 (15 million pounds X \$0.0006 per pound). Therefore, total assessment income for 2000–2001 is estimated at \$327,000. This amount plus adequate funds in the reserve and interest income will be adequate to cover budgeted expenses. Funds in the reserve (approximately \$374,000) will be kept within the approximately six months' operating expenses as recommended by the Board which would be consistent with the order (7 CFR 930.42(a)).

The assessment rates established in this rule will continue in effect indefinitely unless modified, suspended, or terminated by the Secretary upon recommendation and information submitted by the Board or other available information.

Although the assessment rates are effective for an indefinite period, the Board will continue to meet prior to or during each fiscal period to recommend a budget of expenses and consider recommendations for modification of the assessment rates. The dates and times of Board meetings are available from the Board or the Department. Board meetings are open to the public and interested persons may express their views at these meetings. The Department will evaluate Board recommendations and other available information to determine whether modifications of the assessment rates are needed. Further rulemaking will be undertaken as necessary. The Board's 2000–2001 budget and those for subsequent fiscal periods will be reviewed and, as appropriate, approved by the Department.

The Regulatory Flexibility Act and Effects on Small Businesses

The Agricultural Marketing Service (AMS) has considered the economic impact of this action on small entities and has prepared this initial regulatory flexibility analysis. The Regulatory Flexibility Act (RFA) allows AMS to certify that regulations do not have a significant economic impact on a substantial number of small entities. However, as a matter of general policy, AMS' Fruit and Vegetable Programs (Programs) no longer opts for such certification, but rather performs regulatory flexibility analyses for any rulemaking that would generate the interest of a significant number of small entities. Performing such analyses shifts the Programs' efforts from determining whether regulatory flexibility analyses are required to the consideration of

regulatory options and economic or regulatory impacts.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and the rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

There are approximately 40 handlers of tart cherries who are subject to regulation under the order and approximately 900 producers of tart cherries in the regulated area. Small agricultural service firms have been defined by the Small Business Administration (13 CFR 121.201) as those having annual receipts less than \$5,000,000, and small agricultural producers are those whose annual receipts are less than \$500,000. The majority of tart cherry handlers and producers may be classified as small entities.

The Board unanimously recommended, and the Department approved, 2000–2001 expenditures of \$455,000 and assessment rate decreases from \$0.00225 to \$0.0017 per pound for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate or puree and from \$0.001125 to \$0.0085 per pound for cherries utilized for juice, juice concentrate, or puree.

This rule further decreases the assessment rate established for the Board and collected from handlers for the 2000–2001 and subsequent fiscal periods for cherries that are utilized in the production of tart cherry products other than juice, juice concentrate, or puree from \$0.0017 to \$0.0012 per pound, and the assessment rate for cherries utilized for juice, juice concentrate, or puree from \$0.00125 to \$0.0006 per pound. The Board unanimously recommended 2000–2001 expenditures of \$455,000 and the further reduced assessment rates. The quantity of assessable tart cherries expected to be produced during the 2000–2001 crop year is estimated at 280 million pounds. Assessment income, based on this crop, along with interest income and reserves should be adequate to cover budgeted expenses.

The Executive Committee of the Board, after discussing the budget and assessment rates in executive session, recommended the continuation of the current rates. It concluded that it was prudent for the Board to have an

operating reserve of approximately one year's operating expenses.

However, after considerable discussion, the Board concluded it should further reduce handlers' assessment costs and that the reserve should not exceed one-half year's budget amount. Also, the cherry industry has experienced record large crops for the past two seasons, and again this season. The Board discussed the alternative of continuing the existing assessment rates, but concluded that would cause the amount in the operating reserve to exceed what is actually needed.

After the discussion, the Board voted unanimously to further decrease the assessment rates. In deriving the recommended assessment rates, the Board estimated assessable tart cherry production for the crop year at 280 million pounds. It further estimated that about 265 million pounds of the assessable poundage would be utilized in the production of high-valued products, like frozen, canned, or dried cherries, and that about 15 million pounds would be utilized in the production of low-valued products, like juice, juice concentrate, or puree. Potential assessment income from the high valued products would be approximately \$318,000 (265 million pounds X \$0.0012 per pound). The potential income from the tart cherries utilized for juice, juice concentrate, or puree would be \$9,000 (15 million pounds X \$0.0006 per pound). Therefore, total assessment income for 2000–2001 is estimated at \$327,000. This amount plus adequate supplies in the reserve and interest income should be adequate to cover budgeted expenses. Funds in the reserve (approximately \$374,000) will be kept within the approximately six months' operational expenses as recommended by the Board which would be consistent with the order (7 CFR 930.42(a)).

This action further decreases the assessment obligation imposed on handlers. Assessments are applied uniformly on all handlers, and some of the costs may be passed on to producers. However, the assessment rate decreases reduce the burden on handlers, and may reduce the burden on producers. In addition, the Board's meeting was widely publicized throughout the tart cherry industry and all interested persons were invited to attend the meeting and participate in Board deliberations on all issues. Like all Board meetings, the September 8, 2000, meeting was a public meeting and all entities, both large and small, were able to express views on this issue. Finally, interested persons are invited to

submit information on the regulatory and informational impacts of this action on small businesses.

This action imposes no additional reporting or recordkeeping requirements on either small or large tart cherry handlers. As with all Federal marketing order programs, reports and forms are periodically reviewed to reduce information requirements and duplication by industry and public sector agencies.

The Department has not identified any relevant Federal rules that duplicate, overlap, or conflict with this rule.

A small business guide on complying with fruit, vegetable, and specialty crop marketing agreements and orders may be viewed at: <http://www.ams.usda.gov/fv/moab/html>. Any questions about the compliance guide should be sent to Jay Guerber at the previously mentioned address in the **FOR FURTHER INFORMATION CONTACT** section.

After consideration of all relevant material presented, including the information and recommendation submitted by the Board and other available information, it is hereby found that this rule, as hereinafter set forth, will tend to effectuate the declared policy of the Act.

Pursuant to 5 U.S.C. 553, it is also found and determined upon good cause that it is impracticable, unnecessary, and contrary to the public interest to give preliminary notice prior to putting this rule into effect, and that good cause exists for not postponing the effective date of this rule until 30 days after publication in the **Federal Register** because: (1) The 2000–2001 fiscal period began on July 1, 2000, and the marketing order requires that the rates of assessment for each fiscal period apply to all assessable tart cherries handled during such fiscal period; (2) this action decreases the assessment rates for assessable tart cherries beginning on July 1, 2000; (3) handlers are aware of this action which was unanimously recommended by the Board at a public meeting and is similar to other assessment rate actions issued in past years; and (4) this interim final rule provides a 60-day comment period, and all comments timely received will be considered prior to finalization of this rule.

List of Subjects in 7 CFR Part 930

Marketing agreements, Reporting and recordkeeping requirements, Tart cherries.

For the reasons set forth in the preamble, 7 CFR part 930 is amended as follows:

PART 930—TART CHERRIES GROWN IN THE STATES OF MICHIGAN, NEW YORK, PENNSYLVANIA, OREGON, UTAH, WASHINGTON, AND WISCONSIN

1. The authority citation for 7 CFR part 930 continues to read as follows:

Authority: 7 U.S.C. 601–674.

2. Section 930.200 is revised to read as follows:

§ 930.200 Handler assessment rates.

On and after July 1, 2000, the assessment rate imposed on handlers shall be \$0.0012 per pound for tart cherries grown in the production area and utilized in the production of tart cherry products other than juice, juice concentrate, or puree. The assessment rate for tart cherries grown in the production area and utilized in the production of juice, juice concentrate, or puree products shall be \$0.0006 per pound.

Dated: December 27, 2000.

Robert C. Keeney,

Deputy Administrator, Fruit and Vegetable Programs.

[FR Doc. 01–98 Filed 1–2–01; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF JUSTICE

Immigration and Naturalization Service

8 CFR Part 212

[INS No. 2099–00]

RIN 1115–AF95

Removing Burma From the Guam Visa Waiver Program

AGENCY: Immigration and Naturalization Service, Justice.

ACTION: Interim rule with request for comments.

SUMMARY: The Guam Visa Waiver Program (GVWP) waives the nonimmigrant visa requirement for nationals of certain countries, including Burma (internationally recognized as Union of Myanmar), who apply for admission as a nonimmigrant visitor for business or pleasure for the sole purpose of visiting Guam for a period not exceeding 15 days. This rule will remove Burma from the list of countries authorized to participate in the GVWP without significantly restricting legitimate travel to Guam. This action is necessary to protect the United States' law enforcement and national security interests.

DATES: *Effective Date:* This interim rule is effective January 10, 2001.

Comment Date: Written comments must be submitted on or before March 5, 2001.

ADDRESSES: Please submit written comments, in triplicate, to the Director, Policy Directives and Instructions Branch, Immigration and Naturalization Service, 425 I Street, NW, Room 4034, Washington, DC 20536. To ensure proper handling, please reference INS No. 2099–00 on your correspondence. Comments are available for public inspection at the above address by calling (202) 514–3048 to arrange for an appointment.

FOR FURTHER INFORMATION CONTACT: Marty Newingham, Assistant Chief Inspector, Inspections Division, Immigration and Naturalization Service, 425 I Street NW, Room 4064, Washington, DC 20536, telephone number: (202) 616–7992.

SUPPLEMENTARY INFORMATION:

What Is the GVWP?

The GVWP waives the nonimmigrant visa requirement for certain aliens who apply for admission as a nonimmigrant visitor for business or pleasure for the sole purpose of visiting Guam for a period not exceeding 15 days.

The Omnibus Territories Act of 1986, Public Law 99–396, provided statutory authority to implement the GVWP. On December 18, 1987, the Immigration and Naturalization Service (Service) published a final rule in the **Federal Register** at 52 FR 48082, implementing the provisions of Public Law 99–396. The final rule also designated several countries including Burma to the list of countries authorized to participate in the GVWP.

What Are The Requirements for Initial GVWP Participation?

For a country to participate in the GVWP:

- The Attorney General, Secretary of State, and Secretary of Interior, acting jointly, after consultation with the Governor of Guam, must designate the country for the GVWP.
- The waiver of a nonimmigrant visa must pose no threat to the welfare, safety, or security of the United States, its territories, or commonwealths.
- The country must have a nonimmigrant visa refusal rate of 16.9 percent or less or have an established pre-inspection or pre-clearance program pursuant to a bilateral agreement with the United States.
- The country must be in geographical proximity to Guam, unless the country has a substantial volume of nonimmigrant travel to Guam and extends reciprocal privileges to citizens of the United States.

- The Department of State must not have designated the country as being of special humanitarian concern.

What Are The Requirements for Removing a Country From Participation in the GVWP?

The Commissioner shall immediately remove a country from the GVWP if she determines that the program country poses a potential threat to the welfare, safety, or security of the United States (including enforcement of the immigration laws of the United States).

Why Is the Service Removing Burma From the List of Authorized GVWP Countries With This Interim Rule?

- The Service has consulted with the Department of Justice, the Department of State, the Department of Interior, and the Governor of Guam and determined that Burma no longer meets the eligibility requirements for participating in the GVWP.
- Although Congress intended to limit the GVWP to short-term visitors to Guam, recently, the Agana Port-of-Entry has experienced an increasing number of Burmese GVWP applicants for admission who seek to remain permanently in the United States. Consequently, the Service has expended disproportionate resources in order to process Burmese travelers to Guam. These expenditures have created significant obstacles for the orderly enforcement of the U.S. immigration laws in Guam, including extended wait times for arriving travelers seeking to enter Guam.
- The refusal rate for Burmese applicants for visitors visas exceeded 40 percent over the last 4 years (1996–1999).
- The United States has not established a pre-inspection or pre-clearance program in Burma.
- Burma is a country in economic and political turmoil.
- Despite multiparty elections in 1990 that resulted in a decisive victory for the main opposition party, the military junta ruling Burma has refused to relinquish power.
- Burma lacks the will and ability to effectively participate in the anti-drug effort.

Good Cause Exception

This interim rule is effective January 10, 2001, although the Service invites post-promulgation comments and will address any such comments in a final rule. The Service finds that good cause exists for adopting this rule without the prior notice and comment period ordinarily required by 5 U.S.C. 553. Section 212.1(e)(2) of the Service's

existing regulations provides that the Commissioner will immediately remove a country from the GVWP if she determines that the country poses a potential threat to the welfare, safety, or security of the United States, its territories, or commonwealths. As stated in the supplemental portion of this rule the Commissioner has made such a determination in the case of Burma. It would be contrary to the public interest to allow such a potential threat to continue for the prior notice and comment period normally required under 5 U.S.C. 553(b)(B) and (d)(3). The United States' law enforcement and national security concerns outweigh the interests of Burma nationals in having the nonimmigrant visa requirement waived under the GVWP.

The Service adopts this rule with a 7 day delayed effective date. The delayed effective date is to provide some flexibility for nationals of Burma who have already made plans to travel to Guam.

Burma nationals who have made travel plans in advance of 7 days, will still be able to travel to Guam as nonimmigrant visitors, but they will need to obtain an appropriate visa to do so.

Regulatory Flexibility Act

The Commissioner of the Immigration and Naturalization Service, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed this regulation and, by approving it, certifies that this rule will not have a significant economic impact on a substantial number of small entities. After January 10, 2001, Burmese nationals who wish to travel to Guam temporarily for legitimate business or pleasure purposes will still be permitted to visit Guam, if, prior to their journey, they acquire a nonimmigrant visa at a U.S. Embassy or consulate. This rule furthers the law enforcement and national security interests of the United States without significantly restricting legitimate travel to Guam. It does not affect small entities as that term is defined in 5 U.S.C. 601(6).

Executive Order 12866

This rule is not considered by the Department of Justice, Immigration and Naturalization Service, to be a "significant regulatory action" under Executive Order 12866, section 3(f), Regulatory Planning and Review, and the Office of Management and Budget has waived its review process under section 6(a)(3)(A).

Executive Order 13132

This rule will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with section 6 of Executive Order 13132, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by State, local and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one-year, and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 804 of the Small Business Regulatory Enforcement Act of 1996. This rule will not result in an annual effect on the economy of \$100 million or more; a major increase in costs or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based companies to compete with foreign-based companies in domestic and export markets.

Executive Order 12988 Civil Justice Reform

This final rule meets the applicable standards set forth in sections 3(a) and 3(b)(2) of Executive Order 12988.

List of Subjects in 8 CFR Part 212

Administrative practice and procedure, Aliens, Immigration, Passports and visas, Reporting and recordkeeping requirements.

Accordingly, part 212 of chapter I of title 8 of the Code of Federal Regulations is amended as follows:

PART 212—DOCUMENTARY REQUIREMENTS: NONIMMIGRANTS; WAIVERS; ADMISSION OF CERTAIN INADMISSIBLE ALIENS; PAROLE

1. The authority citation for part 212 is revised to read as follows:

Authority: 8 U.S.C. 1101, 1102, 1103, 1182, 1184, 1187, 1225, 1226, 1227; 8 CFR part 2.

§ 212.1 [Amended]

2. Section 212.1 is amended by:
a. Removing the country "Burma," from the first sentence in paragraph (e)(3)(i).

Dated: November 30, 2000.

Mary Ann Wyrsh,

Acting Commissioner, Immigration and Naturalization Service.

[FR Doc. 01-55 Filed 1-2-01; 8:45 am]

BILLING CODE 4410-10-M

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Part 2

[Docket No. 98-065-2]

Animal Welfare; Confiscation of Animals

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the Animal Welfare Act regulations to allow us to place animals confiscated from situations detrimental to the animals' health and well-being with a person or facility that is not licensed by or registered with the Animal and Plant Health Inspection Service, Department of Agriculture, if the person or facility can offer a level of care equal to or exceeding that required by the regulations. The change will facilitate the relocation of confiscated animals and minimize the amount of time neglected, sick, or injured animals stay in unhealthy situations.

EFFECTIVE DATE: February 2, 2001.

FOR FURTHER INFORMATION CONTACT: Dr. Jerry DePoyster, Senior Veterinary Medical Officer, Animal Care, APHIS, 4700 River Road Unit 84, Riverdale, MD 20737-1234; (301) 734-7586.

SUPPLEMENTARY INFORMATION:

Background

The Animal Welfare Act (AWA) (7 U.S.C. 2131 *et seq.*) authorizes the Secretary of Agriculture to promulgate standards and other requirements governing the humane handling, housing, care, treatment, and transportation of certain animals by dealers and other regulated businesses. The Secretary of Agriculture has delegated the responsibility for enforcing the AWA to the Administrator of the Animal and Plant Health Inspection Service (APHIS). Regulations established under the AWA are

contained in 9 CFR parts 1, 2, and 3 (referred to below as the regulations). Part 1 contains definitions for terms used in parts 2 and 3. Part 2 sets forth general requirements, and part 3 sets forth the standards for the humane handling, care, treatment, and transportation of covered animals by regulated entities.

In part 2, § 2.129 provides for the confiscation and destruction of animals. Paragraph (a) of § 2.129 provides that, if an animal being held by a dealer, exhibitor, intermediate handler, or carrier is found by APHIS to be suffering as a result of the failure of the dealer, exhibitor, intermediate handler, or carrier to comply with the regulations, APHIS will notify the dealer, exhibitor, intermediate handler, or carrier of the condition of the animal and request that the animal's suffering be alleviated or that the animal be euthanized. If the dealer, exhibitor, intermediate handler, or carrier refuses to comply with APHIS' request, an APHIS official may confiscate the animal for care, treatment, or disposal.

Prior to this final rule, § 2.129(c) provided that APHIS may place confiscated animals with a person or facility that is licensed by or registered with APHIS and that complies with the regulations and can provide proper care. Further, § 2.129(c) provided that the confiscated animals could be euthanized by APHIS or the receiving facility. Paragraph (c) also provided that the dealer, exhibitor, intermediate handler, or carrier from whom the animals were confiscated was responsible for all costs associated with the placement or euthanasia of the animals.

On May 28, 1999, we published a proposal in the **Federal Register** (64 FR 28940–28942, Docket No. 98–065–1) to amend § 2.129(c) to specifically allow APHIS to place confiscated animals with a person or facility that can offer a level of care equal to or exceeding that required by the regulations, even if the person or facility is not licensed by or registered with APHIS. We proposed this change to increase the options for APHIS when placing confiscated animals and, therefore, allow neglected, sick, or injured animals to be removed more quickly from situations detrimental to their health and well-being.

We solicited comments concerning our proposal for 60 days ending July 27, 1999. We received 19 comments by that date. The comments were from an association representing veterinarians, a State agriculture department, animal humane associations, an association of animal owners, and private citizens.

One commenter opposed the proposal. Thirteen commenters supported the proposal as written. The remaining commenters raised issues that are discussed below.

One commenter stated that the regulations should specify how APHIS will evaluate whether a person or facility that is not licensed by or registered with APHIS can offer an acceptable level of care. Another commenter stated that we should monitor and control facilities that are not licensed by or registered with APHIS to ensure that they are able to provide a level of care equal to or exceeding that required by the regulations.

We do not believe that evaluation criteria should be included in the regulations. Prior to the placement of a confiscated animal, we will, of course, look at the ability of the person or facility to provide adequate security, containment, and care of the animal. Because the circumstances of potential confiscations are variable and unpredictable as to the kinds and numbers of animals and their condition and needs, it would not be appropriate to limit our ability to act.

As to monitoring and controlling facilities that are not licensed by or registered with APHIS, we do not have the authority to apply the requirements of the AWA to persons or facilities that are not licensed by or registered with APHIS. However, we believe that our evaluation of the suitability of a person or facility, prior to the placement of the animals, will ensure that the person or facility can provide a level of care equal to or exceeding that required by the regulations. There are a limited number of persons and facilities that are licensed by or registered with APHIS and that are willing to accept confiscated animals. This change in our regulations will benefit confiscated animals by giving us more flexibility in relocating them.

One commenter stated that persons who accept confiscated animals should be licensed by a State or local government to provide care for animals, such as wildlife rehabilitators, and that facilities should be duly incorporated humane societies, societies for the protection of animals, or other legal entities established for similar purposes. An additional commenter suggested that we remove all references to "persons" and require facilities to be duly incorporated private organizations registered as charitable humane organizations under Federal and State law or operated by local governments for animal impoundment and control purposes.

Humane societies are obviously likely choices for the placement of confiscated animals. However, we do not believe that a person or facility needs to be licensed by or registered with a State or local government to provide a level of care equal to or exceeding that required by our regulations.

One commenter stated that APHIS should maintain a record of where confiscated animals are placed and require the receiving facility (licensed/registered or not) to notify APHIS when the facility transfers the animals or has them euthanized, especially in the case of wild and exotic animals.

We will maintain a record of where the animals are placed after they are confiscated. Persons and facilities that are licensed by or registered with APHIS are required to keep records of the animals on their premises, including animals that we place with them, in accordance with §§ 2.75 and 2.77.

We do not have the authority to impose requirements on persons or facilities that are not subject to the AWA, and we cannot require them to apprise us of the disposition of the animals. However, as stated in the proposal, we expect the types of unregistered or unlicensed facilities most likely to accept confiscated animals are animal shelters run by humane societies, and most animal shelters maintain records regarding the disposition of animals that were on their premises.

One commenter stated that we should stipulate that entities that accept confiscated animals may not place such animals in research situations, and, in the case of wild and exotic animals, that the entities must place them in facilities licensed by or registered with APHIS.

Most of the small number of confiscations that APHIS performs involve dog breeders, and because many of the confiscated animals are in poor health, they would not be good research subjects. However, when a person or facility accepts ownership of a confiscated animal, the person or facility is responsible for the disposition of the animal, including the future placement of the animal. If the person or facility is licensed by or registered with APHIS, future placement or disposition of the animal must be in accordance with the regulations. We believe that it is highly unlikely that any confiscated animal would eventually be used in research. The ability to place confiscated animals with humane societies and other institutions and persons not regulated under the AWA makes such a possibility even less likely.

In some cases, APHIS may place wild or exotic animals at animal sanctuaries. For instance, sanctuaries are being created for nonhuman primates and elephants because these animals are difficult to place, especially if they are in poor health or condition. The development of these sanctuaries will assist us in our efforts to place confiscated nonhuman primates and elephants.

One commenter stated that the regulations should require the dealer, exhibitor, intermediate handler, or carrier from whom the animal is confiscated to bear all of the initial medical costs and other expenses incurred by the facility that accepts the confiscated animal.

The regulations at § 2.129(d) require the dealer, exhibitor, intermediate handler, or carrier from whom the animals are confiscated to bear all costs incurred in performing the placement or euthanasia activities authorized in § 2.129. However, we have found that in most cases the neglect of the animals that we confiscate is directly due to the owner of the animals not having sufficient funds to properly care for the animals. In fact, at times, APHIS has assumed the associated costs for the care or euthanasia of confiscated animals when the dealer, exhibitor, intermediate handler, or carrier from whom the animals were confiscated was unable to pay these costs. Therefore, compensation for the initial medical costs and other expenses incurred by the person or facility that accepts the confiscated animal may not be possible in all cases. If a person or facility accepts a confiscated animal, the person or facility will be responsible for all future costs incurred for the animal that are not covered under § 2.129(d) by the person or facility from whom the animal was confiscated. APHIS will make the person or facility aware of that responsibility at the time that the person or facility agrees to accept the animal.

One commenter stated that if an animal is to be placed with an entity that is not licensed by or registered with APHIS, we should clarify who is liable for the actions of the confiscated animal, especially if the animal bites someone, so that the receiving entity is informed at the time of agreement to accept the animal.

The person or facility that accepts the confiscated animal will be liable for the actions of the animal regardless of whether the person or facility is licensed by or registered with APHIS.

One commenter stated that we should stipulate that an APHIS veterinarian will be involved in the decisionmaking process for approval of the placement of

confiscated animals or euthanasia of animals that are not or cannot be placed, and if an APHIS veterinarian is not available, the State animal health official will be included in the decisionmaking process.

At least one or more APHIS veterinarians will be involved in the decisionmaking process for the placement of confiscated animals or their euthanasia, and we do not consider it necessary to add such a stipulation to the regulations.

One commenter stated that, rather than confiscate the animals, we should allow the animals to remain in their original facilities because APHIS inspectors will have access to the facilities and will, therefore, be able to monitor the progress of the animals. This commenter added that APHIS cannot ensure that a facility offers a level of care that is equal to or exceeds that required by the regulations if the facility is not licensed or inspected by APHIS.

We confiscate animals to remove them from a premises or facility when the licensee or registrant has demonstrated a lack of ability or willingness to provide adequate care. We will continue to do this when it is in the best interests of the animals.

One commenter stated that animals placed at humane societies would be cared for by personnel who are not equipped to handle the animals and that the proposal would subject animals to substandard care and/or euthanasia. This commenter stated that private owners are more likely to locate suitable people for an animal that is not considered an ideal pet by the humane society.

We do not share these fears of humane societies. In fact, we have had great success in the placement of animals with humane societies in potential confiscation situations where dealers voluntarily gave up the animals.

Therefore, for the reasons given in the proposed rule and in this document, we are adopting the proposed rule as a final rule, without change.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be not significant for the purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

We are amending the Animal Welfare Act regulations to allow APHIS to place animals confiscated from situations detrimental to the animals' health and well-being with a person or facility that is not licensed by or registered with

APHIS. The change will increase the options for APHIS when placing confiscated animals and will, therefore, facilitate the relocation of confiscated animals and minimize the amount of time neglected, sick, or injured animals stay in unhealthy situations.

Confiscation is a complicated and expensive procedure. Prior to this final rule, the regulations allowed APHIS to place confiscated animals with a person or facility licensed by or registered with APHIS. Finding a licensee or registrant with the capacity and ability to house and care for the animals' well-being is one of the major challenges in the confiscation process.

This rule will make the task of finding an adequate facility for confiscated animals faster and simpler, which will reduce APHIS' costs associated with locating a facility and the cost of the care APHIS must provide when adequate facilities cannot be located. At times, APHIS assumes the associated costs for care or euthanasia of confiscated animals when the dealer, exhibitor, intermediate handler, or carrier from whom the animals were confiscated is unable to pay these costs and APHIS cannot find a facility at which to place the animals.

The Regulatory Flexibility Act requires that agencies consider the potential economic effects of rules on small businesses, organizations, and governmental jurisdictions. Businesses and organizations potentially affected by this rule are those that are not licensed by or registered with APHIS but that can accommodate and provide adequate care for confiscated animals.

We expect that the types of facilities most likely to accept confiscated animals under this rule are animal shelters run by humane societies. The number of humane societies that are small entities under the Small Business Administration's (SBA) standards is unknown because information as to their size in terms of gross receipts and number of employees is not available. Humane societies are not-for-profit organizations where some of the employees work on a voluntary basis, and there is no way to determine their revenue. In addition, the costs incurred by humane societies are covered by membership donations. In the United States, there are at least 121 known regional humane societies in 35 States. Most of these are in California (at least 14); Texas and Illinois (at least 7 each); Florida, Georgia, and Minnesota (at least 6 each); Oregon, Virginia, Maryland, and Wisconsin (at least 5 each); and Colorado, Alabama, Ohio, Michigan, and Pennsylvania (at least 4 each). In addition, there are a number of shelters

run by other incorporated charitable organizations established for the purpose of preventing cruelty to animals.

One commenter stated that our analysis in the proposed rule of the potential economic effects of the rule contained an error. In the analysis, we stated that there are at least 121 known humane societies in 35 States. The commenter stated that there are over 3,000 incorporated, charitable organizations established for the purpose of preventing cruelty to animals and that these organizations exist in all 50 States and can have names such as humane society, society for the prevention of cruelty to animals, animal welfare league, or pet protection league. The commenter added that there are several thousand municipally operated animal shelters that are exempt from licensing requirements under the AWA and that are willing to house confiscated animals in special cases.

The number we provided in our analysis was the number of regional humane societies known to us and listed by State. We are aware that there are a number of organizations other than humane societies. We agree that if we had referred to all incorporated charitable organizations established for the purpose of preventing cruelty to animals, the number of organizations would be significantly larger than 121.

APHIS confiscates animals only once or twice a year. Adoption of this rule will expedite relocation of any confiscated animals. It is likely that the receiving facilities, as noted above, will be small entities. The regulations require that the dealer, exhibitor, intermediate handler, or carrier from whom the animals are confiscated bear all costs associated with performing the placement or euthanasia. If a facility accepts confiscated animals, that facility will be responsible for the future costs incurred for the care of those animals while at the facility. However, as noted, APHIS needs to place confiscated animals only once or twice a year, and the acceptance of confiscated animals is voluntary.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12372

This program/activity is listed in the Catalog of Federal Domestic Assistance under No. 10.025 and is subject to Executive Order 12372, which requires intergovernmental consultation with

State and local officials. (See 7 CFR part 3015, subpart V.)

Executive Order 12988

This final rule has been reviewed under Executive Order 12988, Civil Justice Reform. It is not intended to have retroactive effect. This rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule. The Act does not provide administrative procedures which must be exhausted prior to a judicial challenge to the provisions of this rule.

Paperwork Reduction Act

This rule contains no information collection or recordkeeping requirements under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 9 CFR Part 2

Animal welfare, Pets, Reporting and recordkeeping requirements, Research.

Accordingly, we are amending 9 CFR part 2 as follows:

PART 2—REGULATIONS

1. The authority citation for part 2 is revised to read as follows:

Authority: 7 U.S.C. 2131–2159; 7 CFR 2.22, 2.80, and 371.7.

2. In § 2.129, paragraph (c) is revised and a new paragraph (d) is added to read as follows:

§ 2.129 Confiscation and destruction of animals.

* * * * *

(c) Confiscated animals may be:

(1) Placed, by sale or donation, with other licensees or registrants that comply with the standards and regulations and can provide proper care; or

(2) Placed with persons or facilities that can offer a level of care equal to or exceeding the standards and regulations, as determined by APHIS, even if the persons or facilities are not licensed by or registered with APHIS; or

(3) Euthanized.

(d) The dealer, exhibitor, intermediate handler, or carrier from whom the animals were confiscated must bear all costs incurred in performing the placement or euthanasia activities authorized by this section.

Done in Washington, DC, this 26th day of December 2000.

Craig A. Reed,

Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 01–57 Filed 1–2–01; 8:45 am]

BILLING CODE 3410–34–P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Part 3

[Docket No. 93–076–15]

RIN 0579–AA59

Animal Welfare; Marine Mammals

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the Animal Welfare Act regulations concerning the humane handling, care, treatment, and transportation of marine mammals in captivity. These regulations were developed by the Marine Mammal Negotiated Rulemaking Advisory Committee and are necessary to ensure that the minimum standards for the humane handling, care, treatment, and transportation of marine mammals in captivity are based on current general, industry, and scientific knowledge and experience.

EFFECTIVE DATE: February 2, 2001.

FOR FURTHER INFORMATION CONTACT: Dr. Barbara Kohn, Senior Staff Veterinarian, Animal Care, APHIS, 4700 River Road Unit 84, Riverdale, MD 20737–1234; (301) 734–7833.

SUPPLEMENTARY INFORMATION:

Background

The Animal Welfare Act (the Act) (7 U.S.C. 2131 *et seq.*, enacted in 1966 and amended in 1970, 1976, 1985, and 1990) authorizes the Secretary of Agriculture to promulgate standards and other requirements governing the humane handling, care, treatment, and transportation of certain animals by dealers, research facilities, exhibitors, carriers, and intermediate handlers. Regulations established under the Act are contained in 9 CFR parts 1, 2, and 3.

The Animal and Plant Health Inspection Service (APHIS) of the United States Department of Agriculture established regulations under the Act in 1979 for the humane handling, care, treatment, and transportation of marine mammals used for research or exhibition purposes. These standards, contained in 9 CFR part 3, subpart E (referred to below as the regulations), were amended in 1984. During the 14 years since the standards were amended, advances have been made, new information has been developed, and new concepts have been implemented with regard to the handling, care, treatment, and

transportation of marine mammals in captivity.

On July 23, 1993, we published in the **Federal Register** (58 FR 39458, Docket No. 93-076-1) an advance notice of proposed rulemaking that solicited comments on appropriate revisions or additions to the standards for the humane handling, care, treatment, and transportation of marine mammals used for research or exhibition. The comments we received supported our intent to revise the regulations and suggested it would be highly desirable to involve all interested parties in developing appropriate regulations. We determined that consensus among interested parties was attainable and that we should proceed with negotiated rulemaking.

On May 22, 1995, we published in the **Federal Register** (60 FR 27049-27051, Docket No. 93-076-3) a notice of intent to establish an advisory committee to advise the Department on how to revise the regulations. The notice included a list of groups tentatively identified by the Department as potential participants on the advisory committee. A committee, called the Marine Mammal Negotiated Rulemaking Advisory Committee (the Committee), was subsequently established in accordance with the Federal Advisory Committee Act (5 U.S.C. App. I). It included all of the groups that were identified in the notice as potential participants, with the exception of the Society for Marine Mammology, which was unable to participate.

The following organizations were included on the Committee as voting members:

American Zoo and Aquarium Association
Alliance of Marine Mammal Parks and Aquariums
International Association of Amusement Parks and Attractions
Marine Mammal Coalition
United States Navy
Center for Marine Conservation
Humane Society of the United States
Animal Welfare Institute, representing a broad coalition of animal concern groups
American Association of Zoo Veterinarians
International Association for Aquatic Animal Medicine
International Marine Animal Trainers Association
Animal and Plant Health Inspection Service

The following organizations or individuals were included on the Committee as observers or consultants. These individuals did not vote on the

final consensus reached by the Committee:

Marine Mammal Commission
National Marine Fisheries Service
Fish and Wildlife Service
Dr. Joseph Geraci, independent consultant to the Committee

The Committee conducted three sessions, on September 25 and 26, 1995, in College Park, MD; on April 1, 2, and 3, 1996, in Riverdale, MD; and on July 8, 9, and 10, 1996, in Riverdale, MD. All meetings were open to the public, with specified times during the meetings established for public participation and comment.

Under the rules governing the negotiated rulemaking process, and in accordance with the organizational protocols established by the Committee, APHIS agreed to publish as a proposed rule any consensus language developed during the meetings unless substantive changes were made as a result of authority exercised by another Federal Government entity. Committee members agreed to refrain from commenting negatively on the consensus-based language in the proposed rule. Consensus language was reached on 13 of the 18 sections that comprise the regulations and on one paragraph in a 14th section: §§ 3.101, 3.104(a), 3.105, 3.107 through 3.110, and 3.112 through 3.118. Sections 3.101 and 3.104(a) contain facility and operating standards. Section 3.101 contains general requirements for facilities housing marine mammals, including construction, water and power supply, drainage, storage, waste disposal, and washroom facilities; § 3.104(a) contains general space requirements for primary enclosures. Sections 3.105 and 3.107 through 3.110 concern animal health and husbandry. Section 3.105 contains feeding requirements; § 3.107 concerns sanitation and pest control; § 3.108 sets standards for employees and attendants; § 3.109 concerns separation of marine mammals; and § 3.110 concerns veterinary care. Sections 3.112 through 3.118 concern transportation of marine mammals. Section 3.112 concerns consignment of marine mammals to carriers and intermediate handlers; § 3.113 contains standards for primary enclosures used to transport marine mammals; § 3.114 contains standards for primary conveyances used to transport marine mammals; § 3.115 contains requirements for provision of food and water during transport; § 3.116 concerns the care of marine mammals by employees or attendants during transport; § 3.117 concerns terminal facilities; and § 3.118 contains

requirements for handling marine mammals during transport.

On February 23, 1999, we published a proposed rule in the **Federal Register** (64 FR 8735-8755, Docket No. 93-076-11) that contained the consensus language developed by the Committee for these sections of the regulations. The proposed rule also contained one provision not agreed on by consensus of the Committee: a provision in current § 3.110(d) concerning maintenance of necropsy records. The proposed rule revised this provision and placed it in § 3.110(g)(2). We included it in the proposed rule in order to complete the section.

We solicited comments concerning our proposal for 60 days ending April 26, 1999. We reopened and extended the deadline for comments until May 26, 1999, in a document published in the **Federal Register** on May 14, 1999 (Docket No. 93-076-14, 64 FR 26330). We received 15 comments by that date. They were from animal welfare organizations, veterinary organizations, and regulated entities that care for marine mammals. Most commenters commended the efforts of the Committee and were supportive of the proposed rule in general. However, all commenters requested changes to specific provisions of the proposal. The comments are discussed below, grouped according to the section of the regulations to which they pertain.

Section 3.101 Facilities, General

Proposed § 3.101 contains general requirements for indoor and outdoor facilities.

Paragraph (a)(1) of proposed § 3.101 includes the requirement that indoor and outdoor housing facilities be constructed to restrict the entrance of unwanted animals. One commenter said that this provision should apply to seagulls at public feeding exhibits because of the risk of disease transmission from seagulls to marine mammals and because the seagulls consume some of the food offered to the marine mammals, making it difficult to assess the marine mammals' nutritional intake.

We are not making any changes in response to this comment. We recognize that birds can present problems at outdoor facilities. The provision in § 3.101(a)(1) is intended to address this problem. In addition, proposed § 3.107(d) requires that a safe and effective program for the control of pests, including avian pests, be established and maintained. Measures to completely eliminate intrusions by seagulls and other birds at outdoor facilities may not always be in the

marine mammals' best interests. Mesh or wire cages over outdoor pools restrict physical contact between birds and marine mammals but increase exposure to droppings by providing a roosting spot for the birds directly over pool areas. This could increase the risk of disease transmission. We believe the proposed regulations are adequate to prevent significant or widespread problems regarding seagulls and other pests at marine mammal facilities.

Proposed paragraph (a)(1) also includes the following provision: "Lagoon and similar natural seawater facilities must maintain effective barrier fences, or other appropriate measures, on all sides of the enclosure not contained by dry land, extending above the high tide water level, to fulfill the requirements of this section." Two commenters suggested that we move the phrase "extending above the high tide water level" to follow "effective barrier fences." The commenters said this would reinforce the Committee's intent, given our statement in the preamble that the Committee agreed that this requirement is not intended to preclude the temporary lowering or removal of part of the barrier fencing above the water line to accommodate filming or similar actions. We agree, and are revising the sentence to read: "Lagoon and similar natural seawater facilities must maintain effective barrier fences extending above the high tide water level, or other appropriate measures, on all sides of the enclosure not contained by dry land to fulfill the requirements of this section."

Paragraph (a)(2) of proposed § 3.101 requires that marine mammals be provided protection from abuse and harassment by the public by the use of a sufficient number of uniformed or readily identifiable employees or attendants or by physical barriers (e.g., fences, walls, distance). One commenter recommended that we additionally require that the employees or attendants be appropriately trained and in permanent attendance. The commenter said that employees must be trained to educate the public about appropriate behavior and must discipline the public for inappropriate behavior, particularly at public feeding exhibitions.

We are not making any changes in response to this comment. When physical barriers are not present (such as at public feeding exhibitions), we believe it is adequate to require that a sufficient number of uniformed or readily identifiable employees or attendants be present. These employees would be charged with protecting the marine mammals on display from abuse or harassment by the public. It follows

that the employees or attendants would have to be trained adequately to perform this function. In addition, if a member of the public is found to be abusing or harassing a marine mammal, we believe the proposed regulation makes it clear that that person must be prevented from continuing such behavior.

Proposed paragraph (a)(3) of § 3.101 requires that facilities implement a written protocol on cleaning primary enclosure surfaces so that the surfaces do not constitute a health hazard to the animals. One commenter asked if there is a history of problems that justifies requiring a written protocol for this activity.

We are not making any changes based on this comment. There have been a sufficient number of noncompliant citations for sanitation regarding primary enclosure surfaces to cause the Committee to agree that this requirement is necessary and reasonable. Requiring a written protocol for what should be routine maintenance will provide a means for APHIS inspectors to determine if cleaning practices are appropriate for the species and type of enclosure and will enable inspectors to monitor whether the procedures specified are being followed.

Another commenter said we should remove the proposed requirement for a written protocol on cleaning primary enclosure surfaces from § 3.101(a)(3) because the same requirement appears in proposed § 3.107. While proposed § 3.107 does concern sanitation in and around primary enclosures, it contains no provision for a written protocol on cleaning enclosure surfaces. Therefore, we are not making any change based on this comment.

A third commenter asked that we change the wording of the proposed requirement for a written protocol on cleaning primary enclosure surfaces. The last sentence of proposed paragraph (a)(3) reads: "All facilities shall implement a written protocol on cleaning so that surfaces do not constitute a health hazard to animals." The commenter was concerned that this sentence does not make it clear that it addresses only primary enclosure surfaces. We believe that the first sentence of proposed paragraph (a)(3) makes it clear that the paragraph as a whole specifically concerns primary enclosure surfaces. Therefore, we are not making any changes based on this comment.

Paragraph (a)(4) of proposed § 3.101 exempts facilities that house marine mammals in natural water areas (tidal basins, bays, estuaries) from the drainage requirements in § 3.101(c)(1). Paragraph (c) of proposed § 3.101

concerns drainage, and paragraph (c)(1) generally requires that adequate drainage be provided for primary enclosure pools. Two commenters suggested that the exemption in paragraph (a)(4) belongs more appropriately in paragraph (c). We are not making a change based on this comment. Paragraph (a) addresses general construction requirements, and, while paragraph (a)(4) does address the issue of drainage, it is also an exemption from a basic construction requirement. Therefore, we believe it is appropriately placed.

The commenters also asked us to make the natural water area facilities described in § 3.101(a)(4) exempt from the drainage requirements in proposed § 3.101(c)(2). We are making no change based on this comment. Paragraph (c)(2) concerns areas within a primary enclosure other than the pool itself, including areas immediately surrounding the pool. It would not be appropriate to exempt natural water area facilities from this type of drainage. Excess water around a pool area and other parts of an enclosure would be a hazard for marine mammals and caretakers, regardless of whether the pool itself is a natural seawater facility or a man-made facility.

Paragraph (b) of proposed § 3.101 concerns water and power supplies. Currently, paragraph (b) includes the requirement that written contingency plans be submitted to and approved by Veterinary Services regarding emergency sources of water and electric power in the event of failure of the primary sources. We proposed that these plans be submitted to and approved by the Deputy Administrator of Animal Care. One commenter said that contingency plans have always been reviewed by on-site visits from Veterinary Services and wondered why we have assigned review of these plans to the Deputy Administrator of Animal Care.

We are making no changes based on this comment. As we explained in the preamble to the proposed rule, APHIS reorganized after the last amendments to the marine mammal regulations. Veterinary Services no longer enforces the Animal Welfare Act. That authority has been reassigned to the Deputy Administrator of Animal Care. Since the reassignment, written contingency plans have been reviewed by Animal Care at the regional office level. The Deputy Administrator may continue to delegate this authority to the appropriate administrative level.

Paragraph (b) of proposed § 3.101 also requires that contingency plans include animal evacuation plans in the event of

a disaster and, if the contingency plan includes release of marine mammals, provision for recall training and retrieval. One commenter was concerned about including details of recall training and retrieval plans as part of the written contingency plan submitted to the Deputy Administrator. The commenter said that this information would then be available under the Freedom of Information Act (FOIA) and that this would not be in the best interests of the marine mammals. The commenter said it is not clear whether this information needs to be submitted as part of the contingency plan.

We are not making any change based on this comment. We believe that proposed paragraph (b) makes it clear that the entire contingency plan, including plans for recall training and retrieval, must be submitted and approved by the Deputy Administrator. Proposed paragraph (b) does not require a detailed description of recall training and retrieval plans, but requires, if release of the animals is a component of the contingency plan, that the plan provide for recall training and retrieval. The intent of this requirement is that facilities provide enough information so that APHIS inspectors can determine whether the animals have been adequately trained for recall and retrieval. We would not require facilities to include information that could compromise the safety or well-being of the animals, such as details on when and where training occurs or the actual signals used for recall. We believe the requirement is appropriate and in the interests of the safety and well-being of the marine mammals.

Another commenter said that we should remove the requirement for recall training provisions in the contingency plan because recall training is not always in the best interests of the animal, specifically if the facility is working with the purpose of reintroducing marine mammals into the wild.

We are not making any change based on this comment. We are unaware of any facilities currently holding marine mammals in anticipation of releasing them into the wild. Moreover, the contingency plan only requires a provision for recall training and retrieval of animals if animals are to be released in the event of a disaster, not as part of a scientific reintroduction-into-the-wild project. In all other instances, quick and efficient retrieval of the animal is in the animal's best interests. We wish to note that any recall training, including boat following, that involves the release of the animals

from their primary enclosure into the wild (meaning water outside the primary enclosure and facility) must be done under appropriate authorization from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service. This issue was discussed during the negotiated rulemaking sessions, and we reiterate that our requirement regarding contingency plans does not preclude the jurisdiction of these agencies in overseeing the release of captive animals into the wild, even if it is for training purposes.

Paragraph (c) of proposed § 3.101 concerns drainage. Paragraph (c)(1) requires that adequate drainage be provided for all primary enclosure pools and be located so that all the water in the pools may be "effectively eliminated" when necessary. Paragraph (c)(2) requires that drainage be provided for primary enclosures and areas immediately surrounding pools and be located so that excess water may be "rapidly eliminated." One commenter said that one of the phrases ("effectively eliminated" or "rapidly eliminated") should be changed so that they are consistent.

We are making no change based on this comment. As explained in the preamble to the proposed rule, paragraph (c)(1) currently requires that drainage allow water to be "rapidly eliminated" from primary enclosure pools. We proposed to change this to read "effectively eliminated." The Committee believed the change was necessary because rapid emptying of primary enclosure pools is not always necessary and, in some cases, can be unsafe for the marine mammals. In paragraph (c)(2), the Committee chose to retain the requirement for rapid elimination of water, because paragraph (c)(2) concerns areas in the primary enclosure other than the pool, including areas immediately surrounding the pool. For safety purposes, rapid elimination of excess water from these areas is necessary and would not harm the animals.

Paragraph (d) of proposed § 3.101 concerns storage of food, toxic substances, supplements, and medication and includes the following requirement:

No substances which are known to be or may be toxic or harmful to marine mammals may be stored or maintained in the marine mammal food storage or preparation areas, except that cleaning agents may be kept in secured cabinets designed and located to prevent food contamination.

Paragraph (b) of proposed § 3.107 concerns food preparation and includes the following requirement:

Substances such as cleansing and sanitizing agents, pesticides, and other potentially toxic agents must be stored in properly labeled containers away from food storage preparation surfaces.

One commenter found these two requirements confusing, and was unsure whether cleaning agents may be kept in food preparation areas.

We agree that the wording may be somewhat confusing. The Committee's intent was that cleaning agents be stored so that they will not be in danger of contaminating food preparation surfaces or food. While cleaning agents may be stored in the area where food is prepared, they must be stored in secured cabinets away from food preparation surfaces. We are making no changes to the requirement in § 3.101(d), but are revising the requirement in § 3.107(b) to make the Committee's intent clearer. As revised, the sentence cited above from § 3.107(b) will read: "Substances such as cleansing and sanitizing agents, pesticides, and other potentially toxic agents must be stored in properly labeled containers in secured cabinets designed and located to prevent contamination of food storage preparation surfaces."

Another commenter recommended combining these requirements into one paragraph. We are not making a change based on this comment. We believe it is appropriate to have the requirements in both paragraphs because each paragraph addresses a separate issue—one addresses storage and one addresses sanitation.

Paragraph (d) of proposed § 3.101 also requires that refrigerators and freezers be used for storing perishable food but provides that chilled and/or iced coolers may be used for under 12 hours. One commenter said that he uses buckets with ice to transfer food from the preparation area to the feeding docks. The commenter was concerned that the language in proposed paragraph (d) would not allow this practice.

We are not making any changes based on this comment. The Committee discussed this issue and determined that buckets with ice can be used to transfer food from a cooler or refrigerator to a feeding area, as long as the food is fed to the marine mammals immediately after transfer. Food safety issues are a concern when food is stored for longer periods of time in uncovered buckets with melting ice. If food is kept in buckets with ice at the feeding area for use in later feedings, it would be a violation of proposed paragraph (d). We do not believe any change is necessary to the proposed regulation to clarify this because paragraph (d) specifically

concerns food storage and not transfer of food for immediate feeding.

Section 3.104 Space Requirements

Proposed § 3.104 concerns space requirements for primary enclosures.

Paragraph (a) of proposed § 3.104 states that an enclosure smaller than required by the regulations may be used to house marine mammals temporarily for nonmedical training, breeding, holding, and transfer purposes. However, proposed paragraph (a) requires that, if housing in a smaller than required enclosure is for longer than 2 weeks and is for the purpose of nonmedical breeding, training, or holding (not transfer), an extension must be justified in writing by the attending veterinarian on a weekly basis.

One commenter asked for whom the written justification is intended. The written justification would serve several purposes, including ensuring that the attending veterinarian is aware of the arrangements, concurs with the reason for such arrangements, and monitors the animal's response to such arrangements. Additionally, APHIS would consult the written justification records to assess compliance with the space requirements and as a basis for discussing any concerns about space with the attending veterinarian.

Another commenter said that proposed § 3.104(a) should be changed to require that, if a marine mammal is housed in a smaller than required enclosure for longer than a few hours, it must be justified in writing by the attending veterinarian on a daily basis. We are not making any changes based on this comment. It would be an unnecessary burden to require such frequent justification. Depending on the design of the facility, it can often take a few hours just to transfer a marine mammal from its primary enclosure into the smaller enclosure, making such frequent justification impractical. We are not aware of any evidence showing that it would be harmful to marine mammals to spend up to 2 weeks in an enclosure smaller than required for primary enclosures. Keeping them in such enclosures for longer periods of time must be weighed by the attending veterinarian in terms of harm versus benefits to the animals, and we believe a weekly justification is adequate to accomplish this. We believe the proposed requirements are adequate to ensure that marine mammals are not kept in enclosures smaller than required for longer than is absolutely necessary.

Another requirement in proposed paragraph (a) is that enclosures smaller than required, for example, gated side

pools abutting primary enclosures, may not be used for permanent housing purposes. Proposed paragraph (a) also states that rotating animals between enclosures that do and do not meet the minimum space requirements is not acceptable. One commenter said that, within the marine mammal exhibition industry, it is common to use gated side pools for permanent housing, rotating the animals between them and the main pool regularly, and this requirement would preclude that use. The commenter suggested reevaluating the wording to clarify that the intent is to prohibit the use of medical or holding pools for permanent housing purposes.

The intent of the Committee was to make it clear that enclosures that do not meet the minimum space requirements for primary enclosures may not be used for permanent housing of marine mammals. The Committee further clarified that this holds true even if the marine mammal is being rotated between enclosures that meet the minimum space requirements and enclosures that do not. Such activity would not meet the requirements of the regulations for primary enclosures. The purpose of making this clarification is to prevent facilities from, for example, generally housing marine mammals in smaller than required enclosures supplemented by letting them into a larger enclosure every few days. Proposed paragraph (a) states that marine mammals may be housed temporarily in enclosures smaller than required for nonmedical training, breeding, holding, and transfer purposes, and proposed § 3.110(b) allows marine mammals to be housed temporarily in enclosures smaller than required for medical treatment or training purposes. Marine mammals may not be housed in enclosures smaller than required for any other purpose.

According to the Committee's intent, if gated side pools are large enough to meet the space requirements for primary enclosures, then the activity the commenter describes would be acceptable. If gated side pools do not meet the minimum space requirements for primary enclosures, then the activity the commenter describes would not be acceptable.

Based on the comment, we believe that the proposed language should be revised to make it clearer. Therefore, we are revising the last two sentences of proposed § 3.104(a). The proposed sentences read as follows:

Such enclosures, for example, gated side pools abutting primary enclosures, shall not be used for permanent housing purposes. Rotating animals between enclosures which

do and do not meet minimum space requirements is not acceptable to comply with these regulations.

We are revising these sentences to read as follows:

Any enclosure that does not meet the minimum space requirement for primary enclosures (including, but not limited to, medical pools or enclosures, holding pools or enclosures, and gated side pools smaller than the minimum space requirements) may not be used for permanent housing purposes. Rotating animals between enclosures that meet the minimum space requirements and enclosures that do not is not an acceptable means of complying with the minimum space requirements for primary enclosures.

One commenter said that animals in his facility are routinely placed in gated side pools abutting their primary enclosure for training and show purposes during certain periods of the day and for short periods for medical and other husbandry reasons. The commenter is concerned that the last sentence of proposed § 3.104(a) (revised above) concerning rotating animals between enclosures would preclude this activity.

We are not making any changes based on this comment. We believe that proposed paragraph (a) makes it clear that gated side pools smaller than the minimum space requirements for primary enclosures may be used for the purposes that the commenter describes. If the sentence concerning rotating animals between enclosures is read within the context of the rest of paragraph (a), we do not believe that there is any ambiguity.

Finally, with regard to proposed § 3.104(a), one commenter said that, in order to facilitate appropriate behavioral and medical management of a facility's population as a whole, this paragraph needs to be clarified to maintain a facility's right to have the necessary flexibility with respect to marine mammal housing; that is, a facility must be able to make appropriate use of all pools.

We are not making any changes based on this comment. The commenter does not specify how the paragraph needs to be clarified. However, we believe that the paragraph clearly allows for appropriate use of pools smaller than required for primary enclosures and prohibits inappropriate use of such pools. We believe the allowances and prohibitions give facilities adequate flexibility, while fulfilling the intent of the Act to ensure that marine mammals are housed under conditions favorable to their health and well-being.

Section 3.105 Feeding

Proposed § 3.105 contains feeding requirements, including provisions to ensure food is nutritious and safely handled.

Paragraph (a) of proposed § 3.105 includes the requirement that marine mammals be offered food at least once per day, except as directed by the attending veterinarian. One commenter said that marine mammals should be offered food more than once per day.

We are making no changes based on this comment. The Act requires that we promulgate minimum standards for the care of marine mammals. We believe that requiring feeding at least once per day is adequate as a minimum standard. Some marine mammals do not require multiple feedings per day; for example, polar bears in maternity dens. Attending veterinarians and animal handlers are free to set up feeding regimens that include multiple feedings per day when they believe it is appropriate for the animal.

Paragraph (b) of proposed § 3.105 includes the requirement that food receptacles be placed so as to minimize contamination of the food. Paragraph (d) of proposed § 3.105 includes the requirement that the maintenance of thawed food be conducted in a manner that will minimize contamination. One commenter said the wording in both these paragraphs should be changed to require that food be handled so as to eliminate contamination.

We are not making any changes based on this comment. This point was debated during the negotiated rulemaking sessions. The Committee reached consensus that, even under ideal circumstances, it may not be possible to completely eliminate contamination of food by microbes, as they are present in the air. Therefore, the term "eliminate" would create a standard impossible to attain. As for contamination by chemicals, proposed § 3.101 contains provisions regarding storage to ensure that food supplies are not contaminated by toxic substances. The Committee agreed that, for these reasons, the term "minimize" would be more appropriate.

Paragraph (c) of proposed § 3.105 includes the requirement that marine mammal feeding records noting the estimated individual daily consumption be maintained at the facility for a period of 1 year and made available to APHIS for inspection. We clarified this requirement in the preamble to the proposed rule as follows: For marine mammals that are individually fed, and not subject to public feeding, the feeding records should reflect an

accurate account of food intake; for animals fed, in part, by the public, and for large, group-fed colonies of marine mammals where individual rations are not practical or feasible to maintain, the daily food consumption should be estimated as precisely as possible. The Committee believed that it would not be necessary to add this clarification to the proposed regulatory language.

However, a few commenters said that the clarification for feeding records should be added to the regulatory language in § 3.105(c). In order to make the section clear for all regulated entities, we are adding the clarification to paragraph (c).

Section 3.107 Sanitation

Proposed § 3.107 concerns sanitation with regard to primary enclosures, food preparation, housekeeping, and pest control.

Paragraph (c) of proposed § 3.107 requires that buildings and grounds, as well as exhibit areas, be kept clean and in good repair and that fences be maintained in good repair. One commenter said this language is overly broad and should be revised to take into account special situations relating to natural open water facilities.

We are not making any changes based on this comment. The purpose of these requirements is to minimize risk of injury to the marine mammals from contaminants found in unclean surroundings and from hazards due to poor condition of fences, buildings, and grounds. We see no reason why exceptions need to be made for natural open water facilities. For example, it is particularly important that fencing and water barriers in open water facilities be kept in good repair to ensure containment of the animals within the enclosure as well as protection from animals outside the enclosure and sharp projections or edges on broken fencing.

Section 3.108 Employees or Attendants

Proposed § 3.108 contains standards for employees and attendants that handle marine mammals.

Paragraph (b) of proposed § 3.108 requires that facilities provide and document participation in and successful completion of a facility training course for employees. Paragraph (b) also specifies minimum components of the course, including teaching species appropriate husbandry techniques, handling techniques, and reporting protocols. One commenter said that the requirements in paragraph (b) would place an unnecessary burden on facilities that already have qualified staff and infringe on the rights of

facilities to determine the aptitude of staff and training methodologies.

We are not making any changes based on this comment. In the preamble to the proposed rule, we said that APHIS had received public complaints about the lack of training and applicable experience of employees in licensed facilities. The Committee made several changes and additions to § 3.108 in order to remedy this problem. Adding the requirement for a facility training course was one of the additions. We continue to believe that a facility training course would be an effective means of ensuring that employees and attendants are equipped with the knowledge necessary to care for the marine mammals properly and meet the requirements of the regulations. The facility training course is a one time requirement for each employee, and the minimal content for training courses specified in paragraph (b) would not impose specific training methodologies. Therefore, we do not believe it imposes an undue burden on facilities.

Paragraph (d) of proposed § 3.108 requires that trainers and handlers meet professionally recognized standards for experience and training. Several commenters asked to what professionally recognized standards we are referring. Another commenter said that we should emphasize that paragraph (d) does not require the use of the standards of any particular group or organization.

We are making no changes based on these comments. We stated in the preamble to the proposed rule that, for purposes of enforcing the requirement, APHIS would use available professional organization standards as a point of reference. We may also use the experts within the marine mammal community as resources, as well as our own expertise and any professionally recognized standards.

One commenter said that we should add a sentence to paragraph (d) to require that trainers and handlers have demonstrable experience and appropriate formal training in marine mammal husbandry and care. We are not making any changes based on this comment. Paragraph (a) of proposed § 3.108 requires that employees and attendants (including trainers and handlers) be adequately trained and that supervisors have demonstrable experience in marine mammal husbandry and care.

Section 3.109 Separation

Proposed § 3.109 concerns social housing and separation of marine mammals.

Proposed § 3.109 requires that marine mammals known to be social in the wild must be housed with at least one compatible animal of the same or biologically related species, except when the attending veterinarian, in consultation with the husbandry/training staff, determines that such housing is not in the best interests of the marine mammal's health or well-being. One commenter said that a situation in one marine park in which an orca is housed with dolphins was discussed during the negotiated rulemaking and was determined to be acceptable under this requirement. The commenter asked that we confirm this.

The commenter is correct that the Committee discussed a marine park that houses an orca with Pacific white-sided dolphins as companions. This arrangement is acceptable under the proposed regulations as long as the animals are compatible and a second compatible orca is not available.

As noted above, proposed § 3.109 includes an exception to the requirement that marine mammals known to be social in the wild must be housed with at least one compatible animal of the same or biologically related species. The exception is if the attending veterinarian in consultation with the husbandry/training staff determines that such housing is not in the best interests of the marine mammal's health or well-being. One commenter said that the attending veterinarian should also consult with facility management before making a decision to house a marine mammal separately.

We are making no changes based on this comment. The Committee discussed whether to require consultation with facility management when making a decision concerning housing a marine mammal separately. The Committee agreed not to add this requirement, in part because of potential conflicts between economic interests and the best interests of the animal. Facility management is typically involved in the activities of husbandry and training staffs and would not be without input into these decisions. Further, the proposed requirement would not prevent attending veterinarians from consulting with facility management if they choose.

Proposed § 3.109 also requires that marine mammals not be housed near other animals that cause them unreasonable stress or discomfort or interfere with their good health. One commenter asked that we remove the word "unreasonable" before "stress and discomfort." The commenter said that

the word "unreasonable" is too open to interpretation.

We are making no changes based on this comment. The Committee debated whether to include a qualifier such as "unreasonable" in this requirement. The Committee reached consensus that a qualifier was necessary because no animal, regardless of the conditions of its housing and even in the wild, is without some degree of stress or discomfort at various times. A requirement that marine mammals be maintained completely without stress or discomfort would be unattainable.

Proposed § 3.109 also requires that marine mammals that are housed separately must have a written plan that includes information on the justification for the length of time the animal will be kept separated or isolated, the type and frequency of enrichment, plans for interaction if appropriate, and provisions for periodic review of the plan by the attending veterinarian. The plan must be approved by the attending veterinarian and developed in consultation with the husbandry/training staff.

One commenter asked why the plan is needed and who the plan is for. We are making no changes based on this comment. Marine mammals are generally social animals. When marine mammals are kept in isolation without the companionship of other marine mammals, it is necessary to enrich their environment in other ways to promote their well-being. We proposed to require the plan to ensure that marine mammals kept in isolation are kept that way for valid reasons and that the animals' special enrichment needs are considered. The plan would be a valuable tool for the facility for making sure personnel caring for the marine mammals understand the special needs of the marine mammals. The plan would also be used by APHIS to determine if the animals' special needs are being considered and if the provisions of the plan are being followed.

Section 3.110 Veterinary Care

Proposed § 3.110 contains minimum standards of veterinary care for marine mammals.

Paragraph (a) of proposed § 3.110 requires that newly acquired marine mammals be isolated from resident marine mammals. One commenter asked if marine mammals that are seasonally transported between facilities would be considered newly acquired animals for purposes of this requirement. The commenter further said that such animals should not be considered newly acquired.

We are not making any changes based on this comment. If marine mammals are moved to a facility that is not their permanent residence, they would be considered newly acquired to that facility, even if they move there every summer, for example, as a result of regular seasonal movement. However, under proposed § 3.110(a), if the newly acquired marine mammals have a known medical history, they must be isolated only until the attending veterinarian determines the animals are in good health. This may be accomplished on the day of arrival at the facility. We believe the requirement for isolation of newly acquired marine mammals is necessary to protect the health of resident marine mammals.

Paragraph (b) of proposed § 3.110 concerns holding facilities for medical treatment or medical training. Proposed paragraph (b) requires that, if a marine mammal is to be held in an enclosure that does not meet the minimum space requirements for primary enclosures for longer than 2 weeks, it must be justified in writing by the attending veterinarian on a weekly basis. One commenter said that this requirement should be changed so that if a marine mammal is to be held in an enclosure smaller than required for longer than a few hours, it must be justified in writing by the attending veterinarian on a daily basis.

We are not making any changes based on this comment. The same comment was received regarding a similar requirement under proposed § 3.104(a) regarding holding marine mammals in smaller than required enclosures for nonmedical training, breeding, or holding. In response to that comment, we said that it would be an unnecessary burden to require such frequent justification. Depending on the design of the facility, it can often take a few hours just to transfer a marine mammal from its primary enclosure into the smaller enclosure, making such frequent justification impractical. We are not aware of any evidence showing that it would be harmful to marine mammals to spend up to 2 weeks in an enclosure smaller than required for primary enclosures. Keeping them in such enclosures for longer periods of time must be weighed by the attending veterinarian in terms of harm versus benefits to the animals, and we believe a weekly justification is adequate to accomplish this. We believe the proposed requirements are adequate to ensure that marine mammals are not kept in enclosures smaller than required for longer than is necessary.

One commenter expressed concern and asked why, in proposed § 3.110(b), the space requirements for isolation of

marine mammals in natural lagoons and coastal facilities are different than for closed system facilities. We are not making any changes based on this comment. Paragraph (b) begins by stating that all facilities must have holding facilities in place and available to meet the needs for isolation, separation, medical treatment, and medical training of marine mammals. The last sentence of paragraph (b) states that, in natural lagoon or coastal enclosures, separation of newly acquired marine mammals must be accomplished using separate enclosures situated within the facility, located to prevent direct contact with resident animals and to minimize the risk of potential airborne or waterborne contamination between newly acquired and resident animals. This clarification for natural lagoons and coastal facilities is necessary because water circulation cannot be controlled or isolated in such facilities. Paragraph (b) makes no distinction between natural lagoon and coastal facilities and closed system facilities with regard to space requirements.

One commenter suggested we move the last sentence of proposed paragraph (b) of § 3.110 to the end of paragraph (a). We are not making any changes based on this comment. Paragraph (a) addresses the need to isolate newly acquired marine mammals. Paragraph (b) addresses the use of isolation facilities, including the use of such facilities for newly acquired animals. We believe that the last sentence of paragraph (b) is appropriately placed.

Two commenters were concerned that the requirements for isolation in proposed § 3.110 (a) and (b) could be construed to require separate quarantine facilities with tanks, filters, and water treatment systems independent of the rest of the facility. The commenters said that, if this is the intent, it would be inappropriate and cost prohibitive. Both commenters also said that, since it is clear that this is not the intent for natural lagoons and coastal enclosures (paragraph (b) acknowledges that water circulation cannot be controlled or isolated in such systems), the requirement should be the same for other types of enclosures.

We are not making any changes based on these comments. Section 3.110 has always contained a requirement for isolation of newly acquired animals and for holding facilities adequate to accomplish isolation. These requirements, therefore, are not new. In general, our use of the word "isolation" corresponds with the common veterinary meaning of prevention of contact with other animals, directly as

well as through water or air. Bacteria and disease can be transmitted through water and air. However, each facility will present unique concerns over how to effectively isolate an animal. Completely separate tanks, filters, and water filtration systems are ideal. In other cases, a single but efficient water filtration and treatment system may accomplish the same thing. Preventing the exchange of airborne pathogens presents the greatest challenge. Our intent is that facilities keep newly acquired animals and animals that need to be isolated for medical purposes as separate as possible from the known healthy animals in the facility. APHIS will work with each licensed and registered facility to address concerns and to help facilitate compliance with this requirement.

A few commenters were concerned that the Committee generally added too much detail to the veterinary care requirements in proposed § 3.110, giving APHIS inspectors opportunities to question veterinarians' protocols. In particular, one commenter cited the requirement in proposed § 3.110(f) that all cetaceans and sirenians be physically examined by the attending veterinarian at least annually and that the examinations include a hands-on physical examination, hematology and blood chemistry, and other diagnostic tests as determined by the attending veterinarian.

We are not making any changes based on these comments. APHIS has been concerned about the quality of veterinary care provided to marine mammals at certain facilities. These concerns were discussed during the negotiated rulemaking. The Committee agreed that it was necessary to provide more specific standards to clarify what is meant by providing adequate veterinary care to marine mammals. The proposed language is based on currently accepted practices and professional veterinary standards. We do not believe that the language the Committee agreed to is overly burdensome, but rather describes the minimum of what is needed in a preventive health program for marine mammals.

Paragraph (g)(1) of proposed § 3.110 concerns necropsy of marine mammals and includes the requirement that a final necropsy report include a pathological diagnosis. One commenter said that, in the past 15 years, he has received several pathology reports from the laboratory stating the cause of death cannot be determined.

We are not making any changes based on this comment. It is possible for a pathological diagnosis to be inconclusive (that is, cause of death

cannot be determined), and this is an accepted diagnosis. The intent of the requirement is to ensure that histopathology is done as part of a necropsy and evaluated by an expert.

Proposed paragraph (g)(1) also requires that necropsies be conducted by or under the supervision of the attending veterinarian. One commenter asks what to do if the attending veterinarian is unavailable because he or she is out of town. We are not making any changes based on this comment. The intent of the requirement is that the necropsy be performed or supervised by a veterinarian experienced in marine mammal medicine. If an attending veterinarian is out of town for an extended period of time, alternative veterinary medical coverage should be arranged. Usually, the attending veterinarian appoints a back-up veterinarian for emergencies. It would be appropriate for the back-up veterinarian to perform the necropsy. However, if the attending veterinarian will be available within a few days, it may be preferable to cool and store the animal until the necropsy can be performed upon the attending veterinarian's return.

Paragraph (g)(2) of proposed § 3.110 concerns maintenance of necropsy reports. This paragraph was not agreed to by consensus of the Committee and was, therefore, open for all public comment, including comments from Committee members.

We proposed in paragraph (g)(2) that necropsy records must be maintained at the facility for a period of 3 years and be presented to APHIS inspectors when requested. We explained in the preamble to the proposed rule that we intend this to mean that the records must be maintained at the home facility of the marine mammal. This requirement would replace the current requirement that necropsy records be maintained at the facility where the marine mammal died. One commenter said that we should require necropsy reports to be maintained both at the home facility and at the facility where the marine mammal died. The commenter said this would be beneficial because some facilities maintain marine mammals only on a seasonal basis, and requiring them to retain necropsy records on animals that have died at their facility would make it possible to identify and compare problems resulting in deaths in successive years.

We agree with the commenter that it would be beneficial to require necropsy records to be maintained at both the home facility and the facility where the marine mammal died (if these are different facilities). Therefore, we are

making the appropriate change in § 3.110(g)(2).

One commenter said that necropsy reports should be submitted to APHIS upon completion by or approval of the attending veterinarian. The commenter stated that this would allow necropsy reports to be obtained by interested persons for purposes of scientific inquiry into the causes of captive marine mammal mortality.

We are making no changes based on this comment. Although the provisions of proposed paragraph (g)(2) are not based on consensus language, the issue addressed by the commenter was discussed during the negotiated rulemaking. Several members of the Committee had strong reservations about the use and interpretation of necropsy reports by untrained individuals or individuals who do not have complete knowledge of an animal's history. We believe that there would be no enforcement benefits or benefits to the animals from requiring necropsy reports to be submitted to APHIS and that it would unnecessarily increase the reporting burden on facilities. Persons interested in pursuing scientific inquiry into captive marine mammal mortality can request information directly from facilities.

Section 3.112 Consignments to Carriers and Intermediate Handlers

Proposed § 3.112 contains requirements for carriers and intermediate handlers involved in the transportation of marine mammals.

Paragraph (c) of proposed § 3.112 concerns temperature. It requires that carriers and intermediate handlers whose facilities fail to maintain a temperature within the range prescribed by the regulations may accept a marine mammal for transport only if the marine mammal is accompanied by a certificate executed and signed by the attending veterinarian. The certificate would have to state that the marine mammal is acclimated to an air temperature range specified on the certificate that is either lower or higher than the prescribed range. Under proposed §§ 3.117 and 3.118, the prescribed temperature range is between 7.2 °C and 23.9 °C or 45 °F and 75 °F.

Two commenters were concerned about the maximum temperature in the prescribed range (75 °F) and the requirement to provide an acclimation certificate for transporters whose facilities exceed that temperature. The commenters said that the southern United States experiences temperatures over 75 °F for half of the year and that requiring an acclimation certificate for marine mammals maintained and

transported in that part of the country would be onerous. One commenter said that this temperature range could induce some carriers to refuse to accept marine mammals for transport, even with an acclimation certificate, for fear of liability. The other commenter suggested setting the maximum temperature for the prescribed range at 90 °F.

We are not making any changes based on these comments. A primary problem with transporting marine mammals is heat stress. As cetaceans, pinnipeds, and sirenians are generally not transported in water, or only partially submerged, their thermoregulatory capacity is already being stressed. The Committee included the proposed requirement in paragraph (c) to help minimize heat-related stress during transport. Paragraph (a) of proposed § 3.112 requires that marine mammals consigned to transport be accompanied by a health certificate signed by the attending veterinarian. The additional requirement of obtaining an acclimation certificate from the attending veterinarian would add minimal burden.

Paragraph (d) of proposed § 3.112 requires that, following the arrival of any marine mammal at the animal holding area of the terminal cargo facility, carriers and intermediate handlers must attempt to notify the consignee who is to receive the marine mammal at least once in every 6-hour period. One commenter said that, since proposed § 3.116(a) requires that all marine mammals be accompanied during transport by a licensed veterinarian, employee, and/or attendant of the shipper or receiver, the requirement in proposed § 3.112(d) is unnecessary and should be deleted.

We are not making any changes based on this comment. We recognize that the notification requirement in proposed § 3.112(d) may not be necessary in most cases, since the marine mammal would be accompanied by an attendant at all times. However, there may be unforeseen circumstances that would make notification necessary; for example, a marine mammal shipped on a commercial flight may be inadvertently sent to the wrong location.

Section 3.113 Primary Enclosures Used To Transport Marine Mammals

Proposed § 3.113 contains standards for primary enclosures used to transport marine mammals.

Paragraph (b) of proposed § 3.113 concerns straps, slings, harnesses, and other devices used to support or restrain marine mammals in their enclosures.

The introductory text of paragraph (b) reads as follows:

Straps, slings, harnesses, or other devices used for body support or restraint, when transporting marine mammals such as cetaceans and sirenians shall * * *

One commenter said that we should add the word "if" to the introductory text, so that it would read as follows:

Straps, slings, harnesses, or other devices, if used for body support or restraint when transporting marine mammals such as cetaceans and sirenians, shall * * *

The commenter suggested that leaving out the word was an inadvertent error, since the current language in § 3.113(b) contains the word "if".

We are making no changes based on this comment. The wording for paragraph (b) was the wording agreed to by the Committee. We do not believe that adding the word "if" changes the meaning of the sentence, since the use of straps, slings, or other such devices is clearly not required.

One commenter said we are inconsistent throughout §§ 3.113, 3.114, 3.117, and 3.118 with the use of the terms "primary enclosure" and "primary transport enclosure." The commenter said that, since all of these sections concern transportation, the term "primary transport enclosure" should be used throughout.

In the preamble to the proposed rule, we explained that throughout these sections, we would use the term "primary transport enclosure" whenever we believed the term was necessary for clarity. In other places, the proposed regulations specify "primary enclosure used to transport marine mammals," and we believed in those places that the intent was clear. Additionally, all of these sections appear in the proposed regulations under the heading "Transportation Standards." However, in reviewing the proposed rule, we realized that in two places we inadvertently failed to use either the term "primary transport enclosure" or "primary enclosure used to transport marine mammals." These places are in § 3.113(c)(2) and in § 3.114(d). For consistency, we are changing "primary enclosure" to "primary transport enclosure" in these two places.

Section 3.116 Care in Transit

Proposed § 3.116 contains requirements for the care of marine mammals in transit.

Paragraph (a) of proposed § 3.116 includes the requirement that, if the attending veterinarian does not accompany the marine mammal during transit, communication with the

attending veterinarian must be maintained in accordance with 9 CFR part 2, § 2.40(b)(3). Section 2.40 contains requirements for adequate veterinary care of any animal covered under the Act that is maintained by a dealer or exhibitor. Paragraph (b)(3) of § 2.40 requires, among other things, that there be daily observations of all animals to assess their health and well-being and that there be a mechanism of direct and frequent communication so that timely and accurate information on problems of animal health, behavior, and well-being can be conveyed to the attending veterinarian.

One commenter said that we should also reference the requirements of 9 CFR part 2, § 2.33(b)(3), in proposed § 3.116(a). The commenter pointed out that § 2.40(b)(3) concerns only marine mammals maintained by dealers and exhibitors, while § 2.33(b)(3) concerns marine mammals maintained by research facilities.

There are very few transports involving marine mammals used in research. We believe the Committee overlooked the reference to § 2.33(b)(3) for this reason. The commenter's suggestion is, however, appropriate, and we are adding the reference to § 2.33(b)(3) to paragraph (a) of proposed § 3.116.

General Comments

We also received several comments that did not pertain to a particular section of the proposed regulations. They are as follows:

One commenter commended the work of the Committee but said that just because everybody agreed, it does not mean the agreement needs to be a rule; and that it is now up to APHIS to determine if all the agreements reached need to become rules.

We conducted negotiated rulemaking for this rule under the Negotiated Rulemaking Act of 1990 (5 U.S.C. 561 *et seq.*) and the Federal Advisory Committee Act (5 U.S.C. App. I). Under the rules governing the negotiated rulemaking process, and in accordance with the organizational protocols established by the Committee, we agreed to publish as a proposed rule any consensus language developed during the Committee meetings unless substantive changes were made as a result of authority exercised by another Federal Government entity. APHIS was a voting member of the Committee and, therefore, was in agreement with the consensus language published in the proposed rule. In this final rule, we have exercised our oversight responsibility and have made minor changes based on concerns of

commenters when we believed they were necessary, and other minor changes when deemed appropriate.

One commenter asked that the Committee work toward consensus on the remaining five sections of the marine mammal regulations. These five are §§ 3.102, 3.103, 3.104 (with the exception of paragraph (a)), 3.106, and 3.111. These sections concern, respectively, indoor facilities, including temperature, ventilation, and lighting; outdoor facilities; space requirements; water quality; and swim-with-the-dolphin programs. Two other commenters were particularly concerned that the space requirements in § 3.104 (b) and (c) and the water quality requirements in § 3.106 were not revised.

The charter for the Committee (under the Federal Advisory Committee Act) has expired. In addition, during the negotiated rulemaking meetings, the Committee agreed that consensus on the remaining five sections was most likely not possible. For these reasons, we have decided to draft proposed revisions to these sections without the use of negotiated rulemaking. We plan to publish proposed changes for these sections in the near future, and these changes will be open for public comment.

One commenter asked that we prohibit physical interactions between captive marine mammals and the public, particularly in public petting and feeding displays. The commenter further stated that the proposed regulations would not significantly improve the welfare of captive cetaceans in petting and feeding displays. We are not making any changes based on this comment. On September 4, 1998, APHIS published in the **Federal Register** (63 FR 47128–47151, Docket No. 93–076–10) a final rule establishing standards for swim-with-the-dolphin interactive programs. APHIS is evaluating the issues surrounding these programs, and intends to publish proposed amendments to interactive program regulations in the future.

Another commenter generally opposed capture, breeding, transport, and public display of cetaceans. We are not making any changes based on this comment. It is not within our authority under the Act to prohibit captivity and display of marine mammals. We believe that the regulations finalized in this document will help to ensure the well-being of marine mammals in captivity.

One commenter recommended setting a maximum daily period during which captive marine mammals may be viewed by humans. The commenter said this is necessary to allow marine

mammals time to meet their social and physical needs. The same commenter also asked that we require facilities to provide continual access to refuge areas for marine mammals on public display, where they can withdraw from both visitor attention and other activities.

We are not making any changes based on this comment. We are not aware of any scientific information that would support provisions to limit exhibition time or require designated areas where marine mammals can obtain refuge from being viewed by the public. For displays that allow the public to enter the animal's enclosure (swim-with-the-dolphin programs), the regulations provide for a sanctuary area that allows the cetaceans to avoid direct human interaction with members of the general public if they choose, and limit the amount of time such interaction can take place. In other pools, there is sufficient space to allow animals to distance themselves from the viewing public if they desire.

One commenter said that, in general, the care in the commenter's facility is consistent with the proposed rule, but the proposed rule will increase documentation requirements, imposing additional paperwork and administrative burdens. We are not making any changes based on this comment. We recognize that additional documentation can seem burdensome, especially to those facilities that maintain a high level of care for their marine mammals. However, the Committee believed that the requirements added in the proposed rule are necessary to verify and ensure that all facilities are complying with the regulations. The reporting and recordkeeping requirements in the proposed rule have been approved by the Office of Management and Budget under the Paperwork Reduction Act.

One commenter said that the proposed rule does not account for the special requirements of research institutions. Specifically, the commenter said that the proposed regulations do not address the need for research faculty, graduate students, and post-doctorate students to participate with the attending veterinarian and husbandry personnel in decisions affecting animal training and research protocols, and the proposed regulations do not offer a role for the Institutional Animal Care and Use Committee (IACUC).

We are not making any changes based on this comment. The proposed regulations do not prevent research facilities from allowing research faculty, graduate students, and post-doctorate students to participate in decisions

made by the attending veterinarian and husbandry personnel. We do believe that requiring specific qualified individuals (the attending veterinarian or husbandry personnel) to be ultimately responsible for certain decisions is necessary to ensure proper care of the animals under the Act. All IACUC responsibilities are addressed in 9 CFR part 2 of the regulations. We do not believe any responsibilities given to the attending veterinarian by the proposed regulations are in conflict with IACUC responsibilities.

Miscellaneous

We are making minor editorial changes for clarity and consistency. For example, we are replacing the word "which" with the word "that" and the word "shall" with the word "must" where appropriate. None of these changes affects the meaning or intent of the regulations.

Therefore, for the reasons given in the proposed rule and in this document, we are adopting the proposed rule as a final rule, with the changes discussed in this document.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be significant for the purposes of Executive Order 12866 and, therefore, has been reviewed by the Office of Management and Budget.

This rule amends the Animal Welfare Act regulations concerning the humane handling, care, treatment, and transportation of marine mammals in captivity. These regulations were developed by the Marine Mammal Negotiated Rulemaking Advisory Committee and APHIS and are necessary to ensure the minimum standards for the humane handling, care, treatment, and transportation of marine mammals in captivity are based on current general, industry, and scientific knowledge and experience.

There are 116 establishments that contain marine mammals in the United States: 40 aquariums, 70 zoos, and 6 research facilities. Of the aquariums, 28 are private, 5 belong to small cities, and 7 are owned by States. Of the zoos, 19 are private, 12 are owned by large cities, 23 are owned by small cities, 3 are owned by counties, and 13 belong to States. Of the research facilities, two are privately owned and four are owned by the public (such as State universities). The average annual revenue for an establishment is approximately \$1.46 million. Nearly 95 percent of the establishments have annual revenues of less than \$5 million and, thus, are

considered to be small according to the Small Business Administration size standards.¹ There were 1,429 marine mammals in these establishments during FY 1997. These included 357 Group I cetaceans, 89 Group II cetaceans, 796 Group I pinnipeds, 16 Group II pinnipeds, 39 sirenians, 21 mustelidae and 111 polar bears. (Group designations for cetaceans and pinnipeds are as shown in Table III of § 3.104 of the regulations.) The Atlantic bottlenose dolphin, harbor seal, California sea lion, and polar bear are the predominant varieties of captive marine mammals, accounting for approximately 74 percent of the total number of captive marine mammals. The second largest group includes the West Indian manatee, walrus, common dolphin, Pacific bottlenose dolphin, and Atlantic white-sided dolphin. These represented 13.3 percent of the total number of captive marine mammals in FY 1997.

Arboreta and botanical or zoological gardens comprise an important subgroup of the amusement parks industry, generating more than \$653 million in revenues and attracting close to 50 million visitors annually. There were 448 establishments in this subgroup in 1997, including the 116 that are regulated for marine mammals. About 27 percent of these are operated for-profit; the rest are nonprofit organizations owned publicly by States, counties, or cities, or owned privately. Ten percent of the 116 facilities regulated for marine mammals display regulated captive marine mammals exclusively; the others may exhibit a combination of marine mammals and terrestrial animals. Some facilities licensed to exhibit marine mammals host only a single variety of marine mammal (e.g., only dolphins, only harbor seals, or only polar bears). Marine mammals account for a very small fraction of all animals in captivity, which number in the hundreds of species.

Most facilities exhibiting marine mammals charge admission fees. Overall, visitor admission fees cover less than 30 percent of the annual budget of zoos and aquariums, although the fees vary substantially between facilities. A few facilities, mostly those that are city owned, do not charge visitors for admission. Fees range from \$1 to \$41 for adults, from \$0 to \$33 for children, and from \$0 to \$36 for seniors.

Admission rates to the for-profit facilities are higher than those of nonprofit facilities, which have some of their budget covered through appropriations and donations.² If the provisions of this rule significantly increase the operational expenses of a facility, admission fees for that facility could be increased. However, the increases in operational expenses as a result of this rule should not have any significant effect on entrance fees in most facilities.

Other than admission charges, these facilities often generate income by renting space for large group functions such as family reunions, wedding receptions, and corporate parties. City- and State-owned facilities finance their budgets through annual appropriations, membership sales, concessions, grants, and donations. The principal sources of income for privately owned, nonprofit establishments include food service, funding drives, membership dues, gift shops, grants, and donations. Many facilities encourage membership through yearly passes that also provide members of one facility with access to other similar facilities. Some zoos offer guided excursions to other parts of the world. A portion of the generated income is often directed to conservation efforts.

This rule is intended to result in clearer, more easily understood regulatory language and enhanced levels of care for marine mammals. Alternatives to this rule were well discussed and debated during the course of the negotiated rulemaking meetings, and the consensus language reflects the best efforts of all participating parties to ensure the health and well-being of marine mammals in captivity.

Several of the amendments simplify and clarify the language of the existing requirements without requiring any substantial changes. Some of the amendments will result in some additional costs for facilities housing marine mammals if they are not already in compliance with these standards. Since approximately 90 percent of the facilities already meet the standards set by consensus and already practice sound marine mammal husbandry, costs for them should be unaffected. For the remaining facilities, increased costs as a result of this rule will likely be passed on to the public in the form of increased admission fees or will result in changes

¹ Arboreta and botanical or zoological gardens with less than \$5 million in annual revenues are classified as being small according to the Small Business Administration guide for defining industries for size standards. Source: 13 CFR 121.201, SIC 0272, p. 354.

² Much of the admission fee information was obtained from Internet home pages of aquariums and botanical and zoological gardens. Data obtained from the home pages were checked with recorded messages of many of the facilities.

in the facility's collection size or diversity.

While it is difficult to quantify all the benefits of this rule, the conditions of captive marine mammals are expected to improve as a result of this action. As stated above, we believe that approximately 90 percent of licensed marine mammal facilities are already meeting or exceeding the requirements of this rule. Therefore, the effect of the requirements will be most apparent within the approximately 10 percent of licensed marine mammal facilities that are not already meeting or exceeding these requirements. The requirements that will likely have the most effect on these facilities are the requirements that clarify veterinary care for marine mammals. Preventive care during annual or semiannual examinations may potentially reduce emergency veterinary costs and result in fewer marine mammal deaths because of improved health of the animals. Healthier animals should also have an increased life expectancy and improved reproductive outcomes. In general, we expect that any improvements in the care and maintenance of marine mammals may be reflected in lower levels of animal distress and suffering and improved quality of life. In addition, improved conditions for captive marine mammals should result in increased satisfaction for members of the public who view these animals in zoos and aquariums.

The following provisions of this rule could generate minor cost increases in facilities that do not already meet these standards.

Section 3.101 currently requires facilities to have a contingency plan addressing relocation during an emergency or natural disaster. This final rule will require that additional and more detailed contingency plans be kept.

In § 3.105, we will require that a daily record of animal feeding be kept by an employee or attendant of the facility, noting daily food consumption of the marine mammals in the facility. Individual feeding records will have to be maintained at the facility for a period of 1 year. Personnel costs to provide for planning, observation, documentation, and record maintenance may increase as a result of these requirements, depending on present staffing.

In § 3.108, we are expanding the training requirements for employees and attendants. Facilities will have to provide and document participation in, and successful completion of, a facility training course by a sufficient number of employees. (This means a number sufficient to maintain the prescribed level of husbandry set forth in the regulations.) Training will need to be done under the direct supervision of experienced trainers who meet professionally recognized standards for their own experience and training. The length of such training sessions is estimated here to be about 4 hours for each trainee. Any increase in costs as a result of this requirement will depend on the current training practice of a facility.

In § 3.109, we are requiring a written plan for any animals kept in isolation. The plan must be approved by the attending veterinarian and developed in consultation with the husbandry/training staff of the facility. The plan must include justification for the length of time an animal will be isolated, the type and frequency of enrichment used to offset the separation or isolation, the interactions planned, and provision for a periodic review by the attending veterinarian. At present, there are not more than 20 animals being housed separately throughout the country. Such record preparation and review by professionals will probably not require more than 30 minutes per animal per week.

In § 3.110, we are adding medical recordkeeping requirements for each animal. This will probably not entail more than 30 minutes for each animal twice per year. We are also adding requirements concerning examinations of marine mammals by the attending veterinarian. All marine mammals in a facility will have to be visually examined at least semiannually and physically examined when deemed necessary, except that cetaceans and sirenians will have to be physically examined at least annually. The physical examinations will have to include a hands-on physical examination, hematology and blood chemistry, and other diagnostic tests as determined by the attending veterinarian. Examinations take an

average of approximately 2 hours per animal. In § 3.110 will also require that both a preliminary and final necropsy report be completed by the attending veterinarian. While most facilities currently provide preliminary and final reports, only one necropsy report is required under current regulations.

In § 3.112, we will require that a health certificate, and possibly an acclimation certificate, signed by the attending veterinarian accompany each animal that is moved to another facility. Issuance of these certificates should not take more than 15 minutes per animal, with an average of two animals moving per facility per year.

In § 3.116, we will require that any transport of a marine mammal for longer than 2 hours duration requires preparation of a transport plan. Preparing such transport plans should take about 1/2 to 2 hours, depending on the circumstances. Most facilities transport marine mammals fewer than two times per year. Facilities that transport marine mammals often have protocols already in place to address this issue. We will require that certain pregnant marine mammals, unweaned young, nursing mothers with young, and marine mammals with certain medical conditions be transported only after approval of the attending veterinarian and with a determination by the attending veterinarian as to whether a veterinarian should accompany the marine mammal during transport. We estimate that not more than five marine mammals that fit one of these categories are transported per year. We will also require that an employee or attendant travel with polar bears being transported to provide care for the animal. Nationally, not more than 10 polar bears are transported per year; an average transport by land takes about 12 hours.

Taken together, these requirements could result in total increase in expenditures of about \$473,000 for all regulated facilities together (see Table A for details). This would yield an average increase in expenditures of \$378 per animal per year or about \$1.04 per animal per day. The table below details the potential additional expenses for marine mammal facilities as a result of the requirements in this rule.

TABLE A.—ADDITIONAL COSTS OF RECORDKEEPING AND TRAINING REQUIREMENTS FOR ALL REGULATED MARINE MAMMAL FACILITIES COMBINED
[Time in hours]

Section	Nonprofessional staff (\$15/hour) ¹	Professional staff (\$20/hour) ²	Veterinarian (\$25/hour) ³	Total value in dollars
3.101 .....	.....	58 .....	.....	\$1,160.00
3.105	21,170 .....	.....	464	329,150.00
3.108	928	928 .....	.....	32,480.00
3.109 .....	.....	.....	10	250.00
3.110 .....	.....	⁴ 2,858	1,893	104,485.00
3.112 .....	.....	29	29	1,305.00
3.116	120 .....	.....	⁵ 60.5	3,312.50
Total Hours	22,218	3,873	2,456.5 .....	.....
Total Cost	\$333,270	\$77,460	\$61,412.50	472,142.50

Note: ¹, ², ³ Denotes estimated hourly wages of nonprofessional attendant, nonveterinarian professional, and veterinarian professional, respectively.

⁴ Represents number of hematology and blood chemistry tests based on two tests per marine mammal per year. Average cost of each test is about \$20. However, the cost of tests varies depending on volume and whether the tests are done in private laboratories or on site. Additionally, most facilities are already doing this testing.

⁵ Represents approval of 1 transport plan per year per facility (116 facilities) at 30 minutes each and approval of transport for 5 marine mammals with medical conditions per year at 30 minutes each.

Because this regulatory action was initiated at the request of the major stakeholders and was undertaken using negotiated rulemaking, the resulting rule is broadly supported by affected groups. Additionally, since 90 percent of licensed marine mammal facilities are already meeting or exceeding the requirements, the actual economic effect of this rule is expected to be minimal.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12372

This program/activity is listed in the Catalog of Federal Domestic Assistance under No. 10.025 and is subject to Executive Order 12372, which requires intergovernmental consultation with State and local officials. (See 7 CFR part 3015, subpart V.)

Executive Order 12988

This final rule has been reviewed under Executive Order 12988, Civil Justice Reform. It is not intended to have retroactive effect. This rule will not preempt any State or local laws, regulations, or policies, unless they present an irreconcilable conflict with this rule. The Act does not provide administrative procedures which must be exhausted prior to a judicial challenge to the provisions of this rule.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or

recordkeeping requirements included in this rule have been approved by the Office of Management and Budget (OMB) under OMB control number 0579-0115.

List of Subjects in 9 CFR Part 3

Animal welfare, Marine mammals, Pets, Reporting and recordkeeping requirements, Research, Transportation.

Accordingly, we are amending 9 CFR part 3 as follows:

PART 3—STANDARDS

1. The authority citation for part 3 continues to read as follows:

Authority: 7 U.S.C. 2131–2159; 7 CFR 2.22, 2.80, and 371.7.

2. Section 3.101 is revised to read as follows:

§ 3.101 Facilities, general.

(a) *Construction requirements.* (1) Indoor and outdoor housing facilities for marine mammals must be structurally sound and must be maintained in good repair to protect the animals from injury, to contain the animals within the facility, and to restrict the entrance of unwanted animals. Lagoon and similar natural seawater facilities must maintain effective barrier fences extending above the high tide water level, or other appropriate measures, on all sides of the enclosure not contained by dry land to fulfill the requirements of this section.

(2) All marine mammals must be provided with protection from abuse and harassment by the viewing public by the use of a sufficient number of uniformed or readily identifiable

employees or attendants to supervise the viewing public, or by physical barriers, such as fences, walls, glass partitions, or distance, or any combination of these.

(3) All surfaces in a primary enclosure must be constructed of durable, nontoxic materials that facilitate cleaning, and disinfection as appropriate, sufficient to maintain water quality parameters as designated in § 3.106. All surfaces must be maintained in good repair as part of a regular, ongoing maintenance program. All facilities must implement a written protocol on cleaning so that surfaces do not constitute a health hazard to animals.

(4) Facilities that utilize natural water areas, such as tidal basins, bays, or estuaries (subject to natural tidewater action), for housing marine mammals are exempt from the drainage requirements of paragraph (c)(1) of this section.

(b) *Water and power supply.* Reliable and adequate sources of water and electric power must be provided by the facility housing marine mammals. Written contingency plans must be submitted to and approved by the Deputy Administrator regarding emergency sources of water and electric power in the event of failure of the primary sources, when such failure could reasonably be expected to be detrimental to the good health and well-being of the marine mammals housed in the facility. Contingency plans must include, but not be limited to, specific animal evacuation plans in the event of a disaster and should describe back-up systems and/or arrangements for

relocating marine mammals requiring artificially cooled or heated water. If the emergency contingency plan includes release of marine mammals, the plan must include provision for recall training and retrieval of such animals.

(c) *Drainage.* (1) Adequate drainage must be provided for all primary enclosure pools and must be located so that all of the water contained in such pools may be effectively eliminated when necessary for cleaning the pool or for other purposes. Drainage effluent from primary enclosure pools must be disposed of in a manner that complies with all applicable Federal, State, and local pollution control laws.

(2) Drainage must be provided for primary enclosures and areas immediately surrounding pools. All drain covers and strainers must be securely fastened in order to minimize the potential risk of animal entrapment. Drains must be located so as to rapidly eliminate excess water (except in pools). Drainage effluent must be disposed of in a manner that complies with all applicable Federal, State, and local pollution control laws.

(d) *Storage.* Supplies of food must be stored in facilities that adequately protect such supplies from deterioration, spoilage (harmful microbial growth), and vermin or other contamination. Refrigerators and freezers (or chilled and/or iced coolers for under 12 hours) must be used for perishable food. No substances that are known to be or may be toxic or harmful to marine mammals may be stored or maintained in the marine mammal food storage or preparation areas, except that cleaning agents may be kept in secured cabinets designed and located to prevent food contamination. Food, supplements, and medications may not be used beyond commonly accepted shelf life or date listed on the label.

(e) *Waste disposal.* Provision must be made for the removal and disposal of animal and food wastes, dead animals, trash, and debris. Disposal facilities must be provided and operated in a manner that will minimize odors and the risk of vermin infestation and disease hazards. All waste disposal procedures must comply with all applicable Federal, State, and local laws pertaining to pollution control, protection of the environment, and public health.

(f) *Employee washroom facilities.* Washroom facilities containing basins, sinks, and, as appropriate, showers, must be provided and conveniently located to maintain cleanliness among employees, attendants, and volunteers. These facilities must be cleaned and sanitized daily.

(g) *Enclosure or pool environmental enhancements.* Any nonfood objects provided for the entertainment or stimulation of marine mammals must be of sufficient size and strength to not be ingestible, readily breakable, or likely to cause injury to marine mammals, and be able to be cleaned, sanitized, and/or replaced effectively.

3. In § 3.104, paragraph (a) is revised to read as follows:

§ 3.104 Space requirements.

(a) *General.* Marine mammals must be housed in primary enclosures that comply with the minimum space requirements prescribed by this part. These enclosures must be constructed and maintained so that the animals contained within are provided sufficient space, both horizontally and vertically, to be able to make normal postural and social adjustments with adequate freedom of movement, in or out of the water. (An exception to these requirements is provided in § 3.110(b) for isolation or separation for medical treatment and/or medical training.) Enclosures smaller than required by the standards may be temporarily used for nonmedical training, breeding, holding, and transfer purposes. If maintenance in such enclosures for nonmedical training, breeding, or holding is to last longer than 2 weeks, such extension must be justified in writing by the attending veterinarian on a weekly basis. If maintenance in such enclosures for transfer is to last longer than 1 week, such extension must be justified in writing by the attending veterinarian on a weekly basis. Any enclosure that does not meet the minimum space requirement for primary enclosures (including, but not limited to, medical pools or enclosures, holding pools or enclosures, and gated side pools smaller than the minimum space requirements) may not be used for permanent housing purposes. Rotating animals between enclosures that meet the minimum space requirements and enclosures that do not is not an acceptable means of complying with the minimum space requirements for primary enclosures.

* * * * *

4. Section 3.105 is revised to read as follows:

§ 3.105 Feeding.

(a) The food for marine mammals must be wholesome, palatable, and free from contamination and must be of sufficient quantity and nutritive value to maintain marine mammals in a state of good health. The diet must be prepared with consideration for factors such as age, species, condition, and size of the

marine mammal being fed. Marine mammals must be offered food at least once a day, except as directed by the attending veterinarian.

(b) Food receptacles, if used, must be located so as to be accessible to all marine mammals in the same primary enclosure and must be placed so as to minimize contamination of the food they contain. Such food receptacles must be cleaned and sanitized after each use.

(c) Food, when given to each marine mammal individually, must be given by an employee or attendant responsible to management who has the necessary knowledge to assure that each marine mammal receives an adequate quantity of food to maintain it in good health. Such employee or attendant is required to have the ability to recognize deviations from a normal state of good health in each marine mammal so that the food intake can be adjusted accordingly. Inappetence exceeding 24 hours must be reported immediately to the attending veterinarian. Public feeding may be permitted only in the presence and under the supervision of a sufficient number of knowledgeable, uniformed employees or attendants. Such employees or attendants must assure that the marine mammals are receiving the proper amount and type of food. Only food supplied by the facility where the marine mammals are kept may be fed to the marine mammals by the public. Marine mammal feeding records noting the estimated individual daily consumption must be maintained at the facility for a period of 1 year and must be made available for APHIS inspection. For marine mammals that are individually fed and not subject to public feeding, the feeding records should reflect an accurate account of food intake; for animals fed, in part, by the public, and for large, group-fed colonies of marine mammals where individual rations are not practical or feasible to maintain, the daily food consumption should be estimated as precisely as possible.

(d) Food preparation and handling must be conducted so as to assure the wholesomeness and nutritive value of the food. Frozen fish or other frozen food must be stored in freezers that are maintained at a maximum temperature of -18°C (0°F). The length of time food is stored and the method of storage, the thawing of frozen food, and the maintenance of thawed food must be conducted in a manner that will minimize contamination and that will assure that the food retains nutritive value and wholesome quality until the time of feeding. When food is thawed in standing or running water, cold water

must be used. All foods must be fed to the marine mammals within 24 hours following the removal of such foods from the freezers for thawing, or if the food has been thawed under refrigeration, it must be fed to the marine mammals within 24 hours of thawing.

5. Section 3.107 is revised to read as follows:

§ 3.107 Sanitation.

(a) *Primary enclosures.* (1) Animal and food waste in areas other than the pool of water must be removed from the primary enclosures at least daily, and more often when necessary, in order to provide a clean environment and minimize health and disease hazards.

(2) Particulate animal and food waste, trash, or debris that enters the primary enclosure pools of water must be removed at least daily, or as often as necessary, to maintain the required water quality and to minimize health and disease hazards to the marine mammals.

(3) The wall and bottom surfaces of the primary enclosure pools of water must be cleaned as often as necessary to maintain proper water quality. Natural organisms (such as algae, coelenterates, or molluscs, for example) that do not degrade water quality as defined in § 3.106, prevent proper maintenance, or pose a health or disease hazard to the animals are not considered contaminants.

(b) *Food preparation.* Equipment and utensils used in food preparation must be cleaned and sanitized after each use. Kitchens and other food handling areas where animal food is prepared must be cleaned at least once daily and sanitized at least once every week. Sanitizing must be accomplished by washing with hot water (8 °C, 180 °F, or higher) and soap or detergent in a mechanical dishwasher, or by washing all soiled surfaces with a detergent solution followed by a safe and effective disinfectant, or by cleaning all soiled surfaces with live steam. Substances such as cleansing and sanitizing agents, pesticides, and other potentially toxic agents must be stored in properly labeled containers in secured cabinets designed and located to prevent contamination of food storage preparation surfaces.

(c) *Housekeeping.* Buildings and grounds, as well as exhibit areas, must be kept clean and in good repair. Fences must be maintained in good repair. Primary enclosures housing marine mammals must not have any loose objects or sharp projections and/or edges which may cause injury or trauma

to the marine mammals contained therein.

(d) *Pest control.* A safe and effective program for the control of insects, ectoparasites, and avian and mammalian pests must be established and maintained. Insecticides or other such chemical agents must not be applied in primary enclosures housing marine mammals except when deemed essential by an attending veterinarian.

6. Section 3.108 is revised to read as follows:

§ 3.108 Employees or attendants.

(a) A sufficient number of adequately trained employees or attendants, responsible to management and working in concert with the attending veterinarian, must be utilized to maintain the prescribed level of husbandry practices set forth in this subpart. Such practices must be conducted under the supervision of a marine mammal caretaker who has demonstrable experience in marine mammal husbandry and care.

(b) The facility will provide and document participation in and successful completion of a facility training course for such employees. This training course will include, but is not limited to, species appropriate husbandry techniques, animal handling techniques, and information on proper reporting protocols, such as recordkeeping and notification of veterinary staff for medical concerns.

(c) Any training of marine mammals must be done by or under the direct supervision of experienced trainers.

(d) Trainers and handlers must meet professionally recognized standards for experience and training.

7. Section 3.109 is revised to read as follows:

§ 3.109 Separation.

Marine mammals, whenever known to be primarily social in the wild, must be housed in their primary enclosure with at least one compatible animal of the same or biologically related species, except when the attending veterinarian, in consultation with the husbandry/training staff, determines that such housing is not in the best interest of the marine mammal's health or well-being. However, marine mammals that are not compatible must not be housed in the same enclosure. Marine mammals must not be housed near other animals that cause them unreasonable stress or discomfort or interfere with their good health. Animals housed separately must have a written plan, approved by the attending veterinarian, developed in consultation with the husbandry/training staff, that includes the

justification for the length of time the animal will be kept separated or isolated, information on the type and frequency of enrichment and interaction, if appropriate, and provisions for periodic review of the plan by the attending veterinarian. Marine mammals that are separated for nonmedical purposes must be held in facilities that meet minimum space requirements as outlined in § 3.104.

8. Section 3.110 is revised to read as follows:

§ 3.110 Veterinary care.

(a) Newly acquired marine mammals must be isolated from resident marine mammals. Animals with a known medical history must be isolated unless or until the newly acquired animals can be reasonably determined to be in good health by the attending veterinarian. Animals without a known medical history must be isolated until it is determined that the newly acquired animals are determined to be in good health by the attending veterinarian. Any communicable disease condition in a newly acquired marine mammal must be remedied before it is placed with resident marine mammals, unless, in the judgment of the attending veterinarian, the potential benefits of a resident animal as a companion to the newly acquired animal outweigh the risks to the resident animal.

(b) Holding facilities must be in place and available to meet the needs for isolation, separation, medical treatment, and medical training of marine mammals. Marine mammals that are isolated or separated for nonmedical purposes must be held in facilities that meet minimum space requirements as outlined in § 3.104. Holding facilities used only for medical treatment and medical training need not meet the minimum space requirements as outlined in § 3.104. Holding of a marine mammal in a medical treatment or medical training enclosure that does not meet minimum space requirements for periods longer than 2 weeks must be noted in the animal's medical record and the attending veterinarian must provide a justification in the animal's medical record. If holding in such enclosures for medical treatment and/or medical training is to last longer than 2 weeks, such extension must be justified in writing by the attending veterinarian on a weekly basis. In natural lagoon or coastal enclosures where isolation cannot be accomplished, since water circulation cannot be controlled or isolated, separation of newly acquired marine mammals must be accomplished using separate enclosures situated within the facility to prevent direct

contact and to minimize the risk of potential airborne and water cross-contamination between newly acquired and resident animals.

(c) Any holding facility used for medical purposes that has contained a marine mammal with an infectious or contagious disease must be cleaned and/or sanitized in a manner prescribed by the attending veterinarian. No healthy animals may be introduced into this holding facility prior to such cleaning and/or sanitizing procedures. Any marine mammal exposed to a contagious animal must be evaluated by the attending veterinarian and monitored and/or isolated for an appropriate period of time as determined by the attending veterinarian.

(d) Individual animal medical records must be kept and made available for APHIS inspection. These medical records must include at least the following information:

(1) Animal identification/name, a physical description, including any identifying markings, scars, etc., age, and sex; and

(2) Physical examination information, including but not limited to length, weight, physical examination results by body system, identification of all medical and physical problems with proposed plan of action, all diagnostic test results, and documentation of treatment.

(e) A copy of the individual animal medical record must accompany any marine mammal upon its transfer to another facility, including contract or satellite facilities.

(f) All marine mammals must be visually examined by the attending veterinarian at least semiannually and must be physically examined under the supervision of and when determined to be necessary by the attending veterinarian. All cetaceans and sirenians must be physically examined by the attending veterinarian at least annually, unless APHIS grants an exception from this requirement based on considerations related to the health and safety of the cetacean or sirenian. These examinations must include, but are not limited to, a hands-on physical examination, hematology and blood chemistry, and other diagnostic tests as determined by the attending veterinarian.

(g)(1) A complete necropsy, including histopathology samples, microbiological cultures, and other testing as appropriate, must be conducted by or under the supervision of the attending veterinarian on all marine mammals that die in captivity. A preliminary necropsy report must be prepared by the

veterinarian listing all pathologic lesions observed. The final necropsy report must include all gross and histopathological findings, the results of all laboratory tests performed, and a pathological diagnosis.

(2) Necropsy records will be maintained at the marine mammal's home facility and at the facility at which it died, if different, for a period of 3 years and must be presented to APHIS inspectors when requested.

9. Section 3.112 is revised to read as follows:

§ 3.112 Consignments to carriers and intermediate handlers.

(a) Carriers and intermediate handlers shall not accept any marine mammal that is presented by any dealer, research facility, exhibitor, operator of an auction sale, or other person, or any department, agency, or instrumentality of the United States or any State or local government for shipment, in commerce, more than 4 hours prior to the scheduled departure of the primary conveyance on which it is to be transported, and that is not accompanied by a health certificate signed by the attending veterinarian stating that the animal was examined within the prior 10 days and found to be in acceptable health for transport: *Provided, however,* That the carrier or intermediate handler and any dealer, research facility, exhibitor, operator of an auction sale, or other person, or any department, agency, or instrumentality of the United States or any State or local government may mutually agree to extend the time of acceptance to not more than 6 hours if specific prior scheduling of the animal shipment to destination has been made.

(b) Any carrier or intermediate handler shall only accept for transportation or transport, in commerce, any marine mammal in a primary transport enclosure that conforms to the requirements in § 3.113 of this subpart: *Provided, however,* That any carrier or intermediate handler may accept for transportation or transport, in commerce, any marine mammal consigned by any department, agency, or instrumentality of the United States having laboratory animal facilities or exhibiting animals or any licensed or registered dealer, research facility, exhibitor, or operator of an auction sale if the consignor furnishes to the carrier or intermediate handler a certificate, signed by the consignor, stating that the primary transport enclosure complies with § 3.113 of this subpart, unless such primary transport enclosure is obviously defective or damaged and it is apparent that it cannot reasonably be expected to contain the marine mammal without

causing suffering or injury to the marine mammal. A copy of any such certificate must accompany the shipment to destination. The certificate must include at least the following information:

(1) Name and address of the consignor;

(2) The number, age, and sex of animals in the primary transport enclosure(s);

(3) A certifying statement (e.g., "I hereby certify that the—(number) primary transport enclosure(s) that are used to transport the animal(s) in this shipment complies (comply) with USDA standards for primary transport enclosures (9 CFR part 3)."); and

(4) The signature of the consignor, and date.

(c) Carriers or intermediate handlers whose facilities fail to maintain a temperature within the range of 7.2 °C (45 °F) to 23.9 °C (75 °F) allowed by § 3.117 of this subpart may accept for transportation or transport, in commerce, any marine mammal consigned by any department, agency, or instrumentality of the United States or of any State or local government, or by any person (including any licensee or registrant under the Act, as well as any private individual) if the consignor furnishes to the carrier or intermediate handler a certificate executed by the attending veterinarian on a specified date that is not more than 10 days prior to delivery of the animal for transportation in commerce, stating that the marine mammal is acclimated to a specific air temperature range lower or higher than those prescribed in §§ 3.117 and 3.118. A copy of the certificate must accompany the shipment to destination. The certificate must include at least the following information:

(1) Name and address of the consignor;

(2) The number, age, and sex of animals in the shipment;

(3) A certifying statement (e.g., "I hereby certify that the animal(s) in this shipment is (are), to the best of my knowledge, acclimated to an air temperature range of ———"); and

(4) The signature of the attending veterinarian and the date.

(d) Carriers and intermediate handlers must attempt to notify the consignee (receiving party) at least once in every 6-hour period following the arrival of any marine mammals at the animal holding area of the terminal cargo facility. The time, date, and method of each attempted notification and the final notification to the consignee and the name of the person notifying the consignee must be recorded on the copy of the shipping document retained by the carrier or intermediate handler and

on a copy of the shipping document accompanying the animal shipment.

10. Section 3.113 is revised to read as follows:

§ 3.113 Primary enclosures used to transport marine mammals.

No dealer, research facility, exhibitor, or operator of an auction sale shall offer for transportation or transport, in commerce, any marine mammal in a primary enclosure that does not conform to the following requirements:

(a) Primary enclosures that are used to transport marine mammals other than cetaceans and sirenians must:

(1) Be constructed from materials of sufficient structural strength to contain the marine mammals;

(2) Be constructed from material that is durable, nontoxic, and cannot be chewed and/or swallowed;

(3) Be able to withstand the normal rigors of transportation;

(4) Have interiors that are free from any protrusions or hazardous openings that could be injurious to the marine mammals contained within;

(5) Be constructed so that no parts of the contained marine mammals are exposed to the outside of the enclosures in any way that may cause injury to the animals or to persons who are nearby or who handle the enclosures;

(6) Have openings that provide access into the enclosures and are secured with locking devices of a type that cannot be accidentally opened;

(7) Have such openings located in a manner that makes them easily accessible at all times for emergency removal and potential treatment of any live marine mammal contained within;

(8) Have air inlets at heights that will provide cross ventilation at all levels (particularly when the marine mammals are in a prone position), are located on all four sides of the enclosures, and cover not less than 20 percent of the total surface area of each side of the enclosures;

(9) Have projecting rims or other devices placed on any ends and sides of the enclosures that have ventilation openings so that there is a minimum air circulation space of 7.6 centimeters (3.0 inches) between the enclosures and any adjacent cargo or conveyance wall;

(10) Be constructed so as to provide sufficient air circulation space to maintain the temperature limits set forth in this subpart; and

(11) Be equipped with adequate handholds or other devices on the exterior of the enclosures to enable them to be lifted without unnecessary tilting and to ensure that the persons handling the enclosures will not come in contact

with any marine mammal contained inside.

(b) Straps, slings, harnesses, or other devices used for body support or restraint, when transporting marine mammals such as cetaceans and sirenians must:

(1) Be designed so as not to prevent access to the marine mammals by attendants for the purpose of administering in-transit care;

(2) Be equipped with special padding to prevent trauma or injury at critical weight pressure points on the body of the marine mammals; and

(3) Be capable of keeping the animals from thrashing about and causing injury to themselves or their attendants, and yet be adequately designed so as not to cause injury to the animals.

(c) Primary enclosures used to transport marine mammals must be large enough to assure that:

(1) In the case of pinnipeds, polar bears, and sea otters, each animal has sufficient space to turn about freely in a stance whereby all four feet or flippers are on the floor and the animal can sit in an upright position and lie in a natural position;

(2) In the case of cetaceans and sirenians, each animal has sufficient space for support of its body in slings, harnesses, or other supporting devices, if used (as prescribed in paragraph (b) of this section), without causing injury to such cetaceans or sirenians due to contact with the primary transport enclosure: *Provided, however*, That animals may be restricted in their movements according to professionally accepted standards when such freedom of movement would constitute a danger to the animals, their handlers, or other persons.

(d) Marine mammals transported in the same primary enclosure must be of the same species and maintained in compatible groups. Marine mammals that have not reached puberty may not be transported in the same primary enclosure with adult marine mammals other than their dams. Socially dependent animals (e.g., sibling, dam, and other members of a family group) must be allowed visual and olfactory contact whenever reasonable. Female marine mammals may not be transported in the same primary enclosure with any mature male marine mammals.

(e) Primary enclosures used to transport marine mammals as provided in this section must have solid bottoms to prevent leakage in shipment and must be cleaned and sanitized in a manner prescribed in § 3.107 of this subpart, if previously used. Within the primary enclosures used to transport

marine mammals, the animals will be maintained on sturdy, rigid, solid floors with adequate drainage.

(f) Primary enclosures used to transport marine mammals, except where such primary enclosures are permanently affixed in the animal cargo space of the primary conveyance, must be clearly marked on top (when present) and on at least one side, or on all sides whenever possible, with the words "Live Animal" or "Wild Animal" in letters not less than 2.5 centimeters (1 inch) in height, and with arrows or other markings to indicate the correct upright position of the container.

(g) Documents accompanying the shipment must be attached in an easily accessible manner to the outside of a primary enclosure that is part of such shipment or be in the possession of the shipping attendant.

(h) When a primary transport enclosure is permanently affixed within the animal cargo space of the primary conveyance so that the front opening is the only source of ventilation for such primary enclosure, the front opening must open directly to the outside or to an unobstructed aisle or passageway within the primary conveyance. Such front ventilation opening must be at least 90 percent of the total surface area of the front wall of the primary enclosure and covered with bars, wire mesh, or smooth expanded metal.

11. Section 3.114 is revised to read as follows:

§ 3.114 Primary conveyances (motor vehicle, rail, air and marine).

(a) The animal cargo space of primary conveyances used in transporting live marine mammals must be constructed in a manner that will protect the health and assure the safety and comfort of the marine mammals contained within at all times. All primary conveyances used must be sufficiently temperature-controlled to provide an appropriate environmental temperature for the species involved and to provide for the safety and comfort of the marine mammal, or other appropriate safeguards (such as, but not limited to, cooling the animal with cold water, adding ice to water-filled enclosures, and use of fans) must be employed to maintain the animal at an appropriate temperature.

(b) The animal cargo space must be constructed and maintained in a manner that will prevent the ingress of engine exhaust fumes and gases in excess of that ordinarily contained in the passenger compartments.

(c) Marine mammals must only be placed in animal cargo spaces that have a supply of air sufficient for each live

animal contained within. Primary transport enclosures must be positioned in the animal cargo spaces of primary conveyances in such a manner that each marine mammal contained within will have access to sufficient air.

(d) Primary transport enclosures must be positioned in primary conveyances in such a manner that, in an emergency, the live marine mammals can be removed from the conveyances as soon as possible.

(e) The interiors of animal cargo spaces in primary conveyances must be kept clean.

(f) Live marine mammals must not knowingly be transported with any material, substance, or device that may be injurious to the health and well-being of the marine mammals unless proper precaution is taken to prevent such injury.

(g) Adequate lighting must be available for marine mammal attendants to properly inspect the animals at any time. If such lighting is not provided by the carrier, provisions must be made by the shipper to supply such lighting.

12. Section 3.115 is revised to read as follows:

§ 3.115 Food and drinking water requirements.

(a) Those marine mammals that require drinking water must be offered potable water within 4 hours of being placed in the primary transport enclosure for transport in commerce. Marine mammals must be provided water as often as necessary and appropriate for the species involved to prevent dehydration, which would jeopardize the good health and well-being of the animals.

(b) Marine mammals being transported in commerce must be offered food as often as necessary and appropriate for the species involved or as determined by the attending veterinarian.

13. Section 3.116 is revised to read as follows:

§ 3.116 Care in transit.

(a) A licensed veterinarian, employee, and/or attendant of the shipper or receiver of any marine mammal being transported, in commerce, knowledgeable and experienced in the area of marine mammal care and transport, must accompany all marine mammals during periods of transportation to provide for their good health and well-being, to observe such marine mammals to determine whether they need veterinary care, and to obtain any needed veterinary care as soon as possible. Any transport of greater than 2 hours duration requires a transport

plan approved by the attending veterinarian that will include the specification of the necessity of the presence of a veterinarian during the transport. If the attending veterinarian does not accompany the animal, communication with the veterinarian must be maintained in accordance with § 2.33(b)(3) and 2.40(b)(3) of this chapter.

(b) The following marine mammals may be transported in commerce only when the transport of such marine mammals has been determined to be appropriate by the attending veterinarian:

(1) A pregnant animal in the last half of pregnancy;

(2) A dependent unweaned young animal;

(3) A nursing mother with young; or

(4) An animal with a medical condition requiring veterinary care, that would be compromised by transport. The attending veterinarian must note on the accompanying health certificate the existence of any of the above conditions. The attending veterinarian must also determine whether a veterinarian should accompany such marine mammals during transport.

(c) Carriers must inform the crew as to the presence of the marine mammals on board the craft, inform the individual accompanying the marine mammals of any unexpected delays as soon as they become known, and accommodate, except as precluded by safety considerations, requests by the shipper or his agent to provide access to the animals or take other necessary actions for the welfare of the animals if a delay occurs.

(d) A sufficient number of employees or attendants of the shipper or receiver of cetaceans or sirenians being transported, in commerce, must provide for such cetaceans and sirenians during periods of transport by:

(1) Keeping the skin moist or preventing the drying of the skin by such methods as intermittent spraying of water or application of a nontoxic emollient;

(2) Assuring that the pectoral flippers are allowed freedom of movement at all times;

(3) Making adjustments in the position of the marine mammals when necessary to prevent necrosis of the skin at weight pressure points;

(4) Keeping the animal cooled and/or warmed sufficiently to prevent overheating, hypothermia, or temperature related stress; and

(5) Calming the marine mammals to avoid struggling, thrashing, and other unnecessary activity that may cause overheating or physical trauma.

(e) A sufficient number of employees or attendants of the shipper or receiver of pinnipeds or polar bears being transported, in commerce, must provide for such pinnipeds and polar bears during periods of transport by:

(1) Keeping the animal cooled and/or warmed sufficiently to prevent overheating, hypothermia, or temperature related stress; and

(2) Calming the marine mammals to avoid struggling, thrashing, and other unnecessary activity that may cause overheating or physical trauma.

(f) Sea otters must be transported in primary enclosures that contain false floors through which water and waste freely pass to keep the interior of the transport unit free from waste materials. Moisture must be provided by water sprayers or ice during transport.

(g) Marine mammals may be removed from their primary transport enclosures only by the attendants or other persons capable of handling such mammals safely.

14. Section 3.117 is revised to read as follows:

§ 3.117 Terminal facilities.

Carriers and intermediate handlers must not commingle marine mammal shipments with inanimate cargo. All animal holding areas of a terminal facility of any carrier or intermediate handler where marine mammal shipments are maintained must be cleaned and sanitized in a manner prescribed in § 3.107 of this subpart to minimize health and disease hazards. An effective program for the control of insects, ectoparasites, and avian and mammalian pests must be established and maintained for all animal holding areas. Any animal holding area containing marine mammals must be ventilated with fresh air or air circulated by means of fans, blowers, or an air conditioning system so as to minimize drafts, odors, and moisture condensation. Auxiliary ventilation, such as exhaust fans and vents or fans or blowers or air conditioning must be used for any animal holding area containing marine mammals when the air temperature within such animal holding area is 23.9 °C (75 °F) or higher. The air temperature around any marine mammal in any animal holding area must not be allowed to fall below 7.2 °C (45 °F). The air temperature around any polar bear must not be allowed to exceed 29.5 °C (85 °F) at any time and no polar bear may be subjected to surrounding air temperatures that exceed 23.9 °C (75 °F) for more than 4 hours at any time. The ambient temperature must be measured in the animal holding area upon arrival of the

shipment by the attendant, carrier, or intermediate handler. The ambient temperature must be measured halfway up the outside of the primary transport enclosure at a distance from the external wall of the primary transport enclosure not to exceed 0.91 meters (3 feet).

15. Section 3.118 is revised to read as follows:

§ 3.118 Handling.

(a) Carriers and intermediate handlers moving marine mammals from the animal holding area of the terminal facility to the primary conveyance or from the primary conveyance to the animal holding area of the terminal facility must provide the following:

(1) *Movement of animals as expeditiously as possible.*

(2) *Shelter from overheating and direct sunlight.* When sunlight is likely to cause overheating, sunburn, or discomfort, sufficient shade must be provided to protect the marine mammals. Marine mammals must not be subjected to surrounding air temperatures that exceed 23.9 °C (75 °F) unless accompanied by an acclimation certificate in accordance with § 3.112 of this subpart. The temperature must be measured and read within or immediately adjacent to the primary transport enclosure.

(3) *Shelter from cold weather.* Marine mammals must be provided with species appropriate protection against cold weather, and such marine mammals must not be subjected to surrounding air temperatures that fall below 7.2 °C (45 °F) unless accompanied by an acclimation certificate in accordance with § 3.112 of this subpart. The temperature must be measured and read within or immediately adjacent to the primary transport enclosure.

(b) Care must be exercised to avoid handling of the primary transport enclosure in a manner that may cause physical harm or distress to the marine mammal contained within.

(c) Enclosures used to transport any marine mammal must not be tossed, dropped, or needlessly tilted and must not be stacked unless properly secured.

Done in Washington, DC, this 26th day of December 2000.

Craig A. Reed,

Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 01-135 Filed 1-2-01; 8:45 am]

BILLING CODE 3410-34-P

FEDERAL RESERVE SYSTEM

12 CFR Part 225

[Regulation Y; Docket No. R-1094]

Bank Holding Companies and Change in Bank Control

DEPARTMENT OF THE TREASURY

Office of the Under Secretary for Domestic Finance

12 CFR Part 1501

RIN 1505-AA85

Financial Subsidiaries

AGENCY: Board of Governors of the Federal Reserve System and Department of the Treasury.

ACTION: Joint interim rule with request for public comments.

SUMMARY: The Board of Governors of the Federal Reserve System and the Secretary of the Treasury (the Agencies) are soliciting comment on interim rules that would implement section 4(k)(5) of the Bank Holding Company Act and section 5136A(b)(3) of the Revised Statutes, as enacted by the Gramm-Leach-Bliley Act. The interim rules find three general types of activities to be financial in nature, and create a mechanism by which financial holding companies, financial subsidiaries of national banks, or others may request that the Board or the Secretary, respectively, define particular activities within one of the three categories.

The Board and the Secretary solicit comments on all aspects of the interim rule and will modify the final rule as appropriate in response to the comments received.

DATES: The interim rule is effective on January 2, 2001. Comments must be received by February 2, 2001.

ADDRESSES: Comments should refer to Docket No. R-1094, and may be mailed to Ms. Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, NW., Washington, DC 20551 or mailed electronically to regs.comments@federalreserve.gov and to Three Financial Activities Regulation, Office of Financial Institution Policy, U.S. Department of the Treasury, 1500 Pennsylvania Avenue, NW., Room SC 37, Washington, DC 20220 (or mailed electronically to financial.institutions@do.treas.gov).

Comments addressed to Ms. Johnson also may be delivered to Room B-2222 of the Eccles Building between 8:45 a.m. and 5:15 p.m. weekdays or delivered to

the guard station in the Eccles Building Courtyard on 20th Street, NW. (between Constitution Avenue and C Street, NW.) at any time. All comments received at the above address will be available for inspection and copying by any member of the public in the Freedom of Information Office, Room MP-500 of the Martin Building, between 9:00 a.m. and 5:00 p.m. weekdays, except as provided in § 261.14 of the Board's Rules Regarding the Availability of Information (12 CFR 261.14). Comments addressed to the Treasury Department may also be delivered to the Treasury Department mail room between the hours of 8:45 a.m. and 5:15 p.m. at the 15th Street entrance to the Treasury Building.

FOR FURTHER INFORMATION CONTACT:

Board: Scott G. Alvarez, Associate General Counsel (202/452-3583), or Andrew S. Baer, Senior Attorney (202/452-2246), Legal Division. Users of Telecommunication Device for Deaf (TTD) only, contact Janice Simms at (202) 872-4984.

Department of the Treasury: Gerry Hughes, Senior Financial Analyst (202/622-2740); Roberta K. McInerney, Assistant General Counsel (Banking and Finance) (202/622-0480); or Gary W. Sutton, Senior Banking Counsel (202/622-0480).

SUPPLEMENTARY INFORMATION:

Background

These interim rules implement section 4(k)(5) of the Bank Holding Company Act ("BHC Act") (12 U.S.C. 1843(k)(5)), which was added to the BHC Act by section 103 of the Gramm-Leach-Bliley Act (Pub. L. 106-102, 113 Stat. 1338 (1999)) (the "GLB Act"), and section 5136A(b)(3) of the Revised Statutes (12 U.S.C. 24a(b)(3)) ("section 5136A"), as enacted by section 121(a) of the GLB Act. The GLB Act amended the BHC Act to allow bank holding companies and foreign banks that qualify as financial holding companies to engage in a broad range of activities that are defined by the GLB Act to be financial in nature or incidental to a financial activity, or that the Board, in consultation with the Secretary of the Treasury, determines to be financial in nature or incidental to a financial activity.¹ Bank holding companies that do not qualify as financial holding companies are limited to engaging in

¹ The GLB Act also allows financial holding companies to seek Board approval to engage in any activity that the Board determines both to be complementary to a financial activity and not to pose a substantial risk to the safety and soundness of depository institutions or the financial system generally. 12 U.S.C. 1843(k)(1)(B).

those nonbanking activities that were permissible for bank holding companies prior to the enactment of the GLB Act. The GLB Act also allowed national banks to establish "financial subsidiaries." A financial subsidiary may engage in most, but not all, activities that are financial in nature or incidental to a financial activity for a financial holding company under section 4(k)(4) of the BHC Act (12 U.S.C. 1843(k)(4)), and may engage in additional activities that are determined by the Secretary in consultation with the Board to be financial in nature or incidental to a financial activity, as well as in activities that are permissible for national banks to engage in directly. 12 U.S.C. 24a.

The activities that were defined by the GLB Act to be financial in nature or incidental to a financial activity are generally set forth in section 4(k)(4) of the BHC Act (12 U.S.C. 1843(k)(4)). In addition, sections 4(k)(5) of the BHC Act and 5136A(b)(3) require the Board and the Secretary, respectively, to define the extent to which three other generally described activities are financial in nature or incidental to a financial activity. The Board and the Secretary may act by regulation or order. The Board must define these activities in a manner consistent with the purposes of the BHC Act, and the Secretary must apply similar standards. The three activities are:

- (i) Lending, exchanging, transferring, investing for others, or safeguarding financial assets other than money or securities;
- (ii) Providing any device or other instrumentality for transferring money or other financial assets; and
- (iii) Arranging, effecting or facilitating financial transactions for the account of third parties.

These three categories encompass a wide range of activities. Included in these categories are some activities in which financial holding companies and national banks and their financial subsidiaries are already permitted to engage. For example, these categories include providing safe deposit services, electronic funds transfer activities, credit and stored-value card activities, securities brokerage activities, as well as finder activities. The categories were intended, however, to allow financial holding companies and financial subsidiaries to engage in activities that were not otherwise permitted for these companies.

The Board and the Secretary therefore solicit comment regarding what activities should be defined by rule to be financial in nature or incidental to a financial activity for purposes of

sections 4(k)(5) and 5136A(b)(3). In addition, the Board and the Secretary solicit comment on an interim rule that creates a mechanism, described below, that would permit agency action by order on proposals to engage in specific activities pursuant to section 4(k)(5).

Interim Rule

The Board and the Secretary are promulgating, on an interim basis, rules that create a procedure by which a financial holding company or a financial subsidiary may obtain a determination from the Board or the Secretary, respectively, that a specific proposed activity does, in fact, fall within one of the three defined types of activities.

The interim rules also provide that the Board and the Secretary will consult with each other with regard to any request for such a determination. This consultation is required by section 4(k)(2)(A) of the BHC Act (12 U.S.C. 1843(k)(2)(A)), which requires the Board to notify the Secretary of any request under section 4(k) for a determination of whether an activity is financial in nature or incidental to a financial activity, and by section 5136A(b)(1)(B) (12 U.S.C. 24a(b)(1)(B)), which requires similar notification and consultation for proposals raised before the Secretary. Following this consultation, the agency to which the request was made will promptly issue a written determination regarding whether the specific proposed activity falls within one of the three categories of activities listed in sections 4(k)(5) and 5136A(b)(3). The Board and the Secretary believe that requiring financial holding companies and financial subsidiaries that seek to engage in particular activities pursuant to section 4(k)(5) or section 5136A(b)(3) to file requests with the appropriate agency for approval of those activities is necessary at this time because of the broad scope of the statutory language.

Any request made under the interim rules for a determination that an activity falls within one of the three listed categories must be submitted in writing to the Board or the Secretary, as appropriate, and must identify and define the activity for which the determination is sought, including a precise description of what the activity would involve and how and by what entity it would be conducted. The request must also include information that supports the requested determination, and in particular information regarding how the proposed activity falls into one of the three categories and any other information required by the Board or the Secretary.

In reviewing requests to find that a specific activity falls within one of the three categories, the Board and the Secretary will take into account the same factors each must consider when determining whether any activity is financial in nature or incidental to a financial activity. These factors include, among other things, changes in marketplaces in which financial holding companies and banks compete, changes in the technology for delivering financial services, and whether the activity is necessary or appropriate to allow financial holding companies and their affiliates, or banks and their subsidiaries, to compete effectively with any company seeking to provide financial services in the United States.²

The mechanism for reviewing specific requests under sections 4(k)(5) and 5136A(b)(3) is being adopted on an interim basis to allow interested financial holding companies and financial subsidiaries to take advantage of these authorities immediately. The agencies invite comment on this interim mechanism.

The Board and the Secretary also invite comment generally on what, if any, activities should be defined by rule to be within the authorities granted by sections 4(k)(5) and 5136A(b)(3). In this regard, the Board's Regulation Y currently employs the term "financial asset" primarily in connection with securities and precious metals.³ The Board and the Treasury solicit comment regarding what other types of assets should also be considered financial assets for purposes of section 4(k)(5) and section 5136A(b)(3). In this regard, the Board and the Secretary believe that it would be inconsistent with the purposes of the GLB Act and the BHC Act to treat as a financial asset any item that can be purchased or acquired in exchange for a financial instrument such as cash.

Once the appropriate agency has determined that a particular activity is financial in nature or incidental to a financial activity under sections 4(k)(5) or 5136A(b)(3), either by rule or by order, other financial holding companies and financial subsidiaries would be eligible to engage in the activity if applicable requirements are met. A financial holding company must file a notice with the Board within 30 days after commencement of the activity, in accordance with section 4(k)(6) of the BHC Act (12 U.S.C. 1843(k)(6)) and section 225.87 of the Board's Regulation Y (12 CFR 225.87). A national bank seeking to engage in the

² 12 U.S.C. 24a(b)(2) and 1843(k)(3).

³ 12 C.F.R. 225.28(b)(8)(ii)(B).

activity through a financial subsidiary must file a notice with the OCC in accordance with section 5136A and section 5.39(i) of the regulations of the OCC (12 CFR 5.39(i)). In either case, the company must conduct the activity in accordance with the relevant order or rule.

The Board and the Secretary invite comment on all aspects of the proposal and interim rules.

Plain Language

Section 722 of the GLB Act requires the Board to use "plain language" in all proposed and final rules published after January 1, 2000. In light of this requirement, the Board has sought to present its proposed rule in a simple and straightforward manner and has included in the rule examples of activities that would be permissible under the proposed rule. The Board invites comments on whether there are additional steps the Board could take to make the proposed rule easier to understand.

Regulatory Flexibility Act Analysis

Pursuant to section 605(b) of the Regulatory Flexibility Act, the Agencies certify that the interim rules would not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The interim rules would reduce the regulatory burden on financial holding companies and financial subsidiaries of national banks by permitting them to engage in an expanded range of activities, if they choose to do so. The interim rules would apply to all financial holding companies and national bank financial subsidiaries, regardless of their size. The interim rules should enhance the ability of financial holding companies and financial subsidiaries, including small financial holding companies and financial subsidiaries, to compete with other providers of financial services in the United States and to respond to technological and other changes in the marketplace in which they compete. Accordingly, a regulatory flexibility analysis is not required.

Administrative Procedure Act

The provisions of the rule are effective on January 2, 2001 on an interim basis. Pursuant to 5 U.S.C. 553, the Board and the Secretary find that it is impracticable to review public comments prior to the effective date of the interim rule, and that there is good cause to make the interim rule effective on January 2, 2001, due to the fact that the rule sets forth procedures to

implement statutory changes that became effective on March 11, 2000. Specifically, the rule sets forth a mechanism through which the Board and the Secretary may act on requests to find particular activities to be permissible for financial holding companies or financial subsidiaries of national banks pursuant to section 4(k)(5) or 5136A(b)(3). The Board and the Secretary are seeking public comment on all aspects of the interim rule and will amend the rule as appropriate after reviewing the comments.

Paperwork Reduction Act

Board: In accordance with section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Ch. 35; 5 CFR 1320 Appendix A.1), the Board reviewed the interim rule under the authority delegated to the Board by the Office of Management and Budget.

The collection of information requirements in this interim rulemaking are found in 12 CFR 225.86. This information is required to evidence compliance with the requirements of Title I of the GLB Act, which amends section 4 of the Bank Holding Company Act (12 U.S.C. 1843). The respondents are current and future bank holding companies and foreign banking organizations.

The specific written request cited in 12 CFR 225.86(d)(2) provides that a financial holding company that wishes to engage in a particular activity pursuant to section 4(k)(5) of the BHC Act and 12 CFR 225.86(b)(1) must file a request with the Board that it find the proposed activity to fall under one of the three categories of activities listed in section 4(k)(5) and 12 CFR 225.86(b)(1). If the Board has previously determined that the proposed activity falls under one of those three categories, no such request need be made. The request must include information that specifically describes the proposed activity, and that articulates reasons why the activity should be considered to fall under one of the three listed activity categories. There will be no reporting form for this information collection. The agency form number for this written request is FR 4012. The Federal Reserve estimates that approximately 25 financial holding companies will file the requests for Board determination during the first year and that it will take approximately 1 hour to file such request. This would result in an estimated annual burden of 25 hours.

The OMB control number for this interim rule is 7100-0292. The Federal Reserve may not conduct or sponsor, and an organization is not required to

respond to this information collection unless the Board has displayed a valid OMB control number.

A financial holding company may request confidentiality for the information contained in this information collection pursuant to sections (b)(4) and (b)(6) of the Freedom of Information Act (5 U.S.C. 552(b)(4) and (b)(6)).

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the Federal Reserve's functions, including whether the information has practical utility; (b) the accuracy of the Federal Reserve's estimate of the burden of the proposed information collection, including the cost of compliance; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of information collection on respondents, including through the use of automated collection techniques or other forms of information technology. Comments on the collection of information should be sent to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503, with copies of such comments to be sent to Mary M. West, Federal Reserve Board Clearance Officer, Division of Research and Statistics, Mail Stop 97, Board of Governors of the Federal Reserve System, Washington, DC 20551.

Treasury: This regulation is being issued without prior notice and public procedure pursuant to the Administrative Procedure Act (5 U.S.C. 553). For this reason, the collection of information contained in this regulation has been reviewed under the requirements of the Paperwork Reduction Act (44 U.S.C. 3507(j)) and, pending receipt and evaluation of public comments, approved by the Office of Management and Budget (OMB) under control number 1505-0179. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid control number assigned by OMB.

Comments concerning the collection of information should be directed to OMB, Attention: Desk Officer for the Department of the Treasury, Office of Information and Regulatory Affairs, Washington, D.C., 20503, with copies to Gary Sutton, Senior Banking Counsel, Office of General Counsel, 1500 Pennsylvania Avenue NW., Room 2014, Washington, DC 20220. Any such comments should be submitted not later than February 2, 2001. Comments are specifically requested concerning:

Whether the proposed collection of information is necessary for the proper performance of the functions of the Secretary, including whether the information will have practical utility; the accuracy of the estimated burden associated with the proposed collection of information (see below); how to enhance the quality, utility, and clarity of the information to be collected; how to minimize the burden of complying with the proposed collection of information, including the application of automated collection techniques or other forms of information technology; and estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

The collection of information in this regulation is in 12 CFR section 1501.2. This information is required to request that the Secretary determine that a particular activity is included within three general categories of activities and therefore that it is financial in nature or incidental to a financial activity. This information will be used to enable the Secretary to evaluate a request for such a determination. The collection of information is required to obtain a benefit. The likely respondents are national banks.

Estimated total annual reporting burden: 100 hours.

Estimated average annual burden hours per respondent: 20 hours.

Estimated number of respondents: 5.

Estimated annual frequency of responses: once.

Executive Order 12866 Determination

The Department of the Treasury has determined that this rule does not constitute a "significant regulatory action" for the purposes of Executive Order 12866.

List of Subjects

12 CFR Part 225

Administrative practice and procedure, Banks, banking, Federal Reserve System, Holding companies, Reporting and record keeping requirements, Securities.

12 CFR Part 1501

Administrative practice and procedure, National banks, Reporting and recordkeeping requirements.

Board of Governors of the Federal Reserve System

12 CFR Chapter II

Authority and Issuance

For the reasons set out in the joint preamble, the Board amends 12 CFR Part 225 as follows:

PART 225—BANK HOLDING COMPANY AND CHANGE IN BANK CONTROL (REGULATION Y)

1. The authority citation for part 225 continues to read as follows:

Authority: 12 U.S.C. 1817(j)(13), 1818, 1828(o), 1831(i), 1831p-1, 1843(c)(8), 1843(k), 1844(b), 1972(1), 3106, 3108, 3310, 3331–3351, 3907, and 3909.

2. In § 225.86, a new paragraph (d) is added and reserved; and a new paragraph (e) is added to read as follows:

§ 225.86 What activities are permissible for financial holding companies?

* * * * *

(e) *Activities permitted under section 4(k)(5) of the Bank Holding Company Act (12 U.S.C. 1843(k)(5)).*

(1) The following types of activities are financial in nature or incidental to a financial activity when conducted pursuant to a determination by the Board under paragraph (e)(2) of this section:

(i) Lending, exchanging, transferring, investing for others, or safeguarding financial assets other than money or securities;

(ii) Providing any device or other instrumentality for transferring money or other financial assets; and

(iii) Arranging, effecting, or facilitating financial transactions for the account of third parties.

(2) *Review of specific activities.*

(i) *Is a specific request required?* A financial holding company that wishes to engage on the basis of paragraph (e)(1) of this section in an activity that is not otherwise permissible for a financial holding company must obtain a determination from the Board that the activity is permitted under paragraph (e)(1).

(ii) *Consultation with the Secretary of the Treasury.* After receiving a request under this section, the Board will provide the Secretary of the Treasury with a copy of the request and consult with the Secretary in accordance with section 4(k)(2)(A) of the Bank Holding Company Act (12 U.S.C. 1843(k)(2)(A)).

(iii) *Board action on requests.* After consultation with the Secretary, the Board will promptly make a written determination regarding whether the specific activity described in the request is included in an activity category listed in paragraph (e)(1) of this section and is therefore either financial in nature or incidental to a financial activity.

(3) *What factors will the Board consider?* In evaluating a request made under this section, the Board will take into account the factors listed in section 4(k)(3) of the BHC Act (12 U.S.C.

1843(k)(3)) that it must consider when determining whether an activity is financial in nature or incidental to a financial activity.

(4) *What information must the request contain?* Any request by a financial holding company under this section must be in writing and must:

(i) Identify and define the activity for which the determination is sought, specifically describing what the activity would involve and how the activity would be conducted; and

(ii) Provide information supporting the requested determination, including information regarding how the proposed activity falls into one of the categories listed in paragraph (e)(1) of this section, and any other information required by the Board concerning the proposed activity.

By order of the Board of Governors of the Federal Reserve System.

Dated: December 27, 2000.

Jennifer J. Johnson,
Secretary of the Board.

Department of the Treasury

12 CFR Chapter XV

Authority and Issuance

For the reasons set forth in the preamble, the Department of the Treasury amends Part 1501 to Chapter XV of Title 12, to read as follows:

PART 1501—FINANCIAL SUBSIDIARIES

1. The authority citation for part 1501 continues to read as follows:

Authority: Section 5136A of the Revised Statutes (12 U.S.C. 24a).

2. Section 1501.2 is redesignated as § 1501.3.

3. A new § 1501.2 is added to read as follows:

§ 1501.2 What activities has the Secretary determined to be financial in nature or incidental to a financial activity?

(a) *Activities permitted under section 5136A(b)(3) of the Revised Statutes (12 U.S.C. 24a(b)(3)).*

(1) The following types of activities are financial in nature or incidental to a financial activity when conducted pursuant to a determination by the Secretary under paragraph (a)(2) of this section:

(i) Lending, exchanging, transferring, investing for others, or safeguarding financial assets other than money or securities;

(ii) Providing any device or other instrumentality for transferring money or other financial assets; and

(iii) Arranging, effecting, or facilitating financial transactions for the account of third parties.

(2) *Review of specific activities.*

(i) *Is a specific request required?* A financial subsidiary that wishes to engage on the basis of paragraph (a)(1) of this section in an activity that is not otherwise permissible for a financial subsidiary must obtain a determination from the Secretary that the activity is permitted under paragraph (a)(1).

(ii) *Consultation with the Board of Governors of the Federal Reserve System.* After receiving a request under this section, the Secretary will provide the Board of Governors of the Federal Reserve System (Board) with a copy of the request and consult with the Board in accordance with section 5136A(b)(1)(B)(i) of the Revised Statutes (12 U.S.C. 24a(b)(1)(B)(i)).

(iii) *Secretary action on requests.* After consultation with the Board, the Secretary will promptly make a written determination regarding whether the specific activity described in the request is included in an activity category listed in paragraph (a)(1) of this section and is therefore either financial in nature or incidental to a financial activity.

(3) *What factors will the Secretary consider?* In evaluating a request made under this section, the Secretary will take into account the factors listed in section 5136A(b)(2) of the Revised Statutes (12 U.S.C. 24a(b)(2)) that the Secretary must consider when determining whether an activity is financial in nature or incidental to a financial activity.

(4) *What information must the request contain?* Any request by financial subsidiary under this section must be in writing and must:

(i) Identify and define the activity for which the determination is sought, specifically describing what the activity would involve and how the activity would be conducted; and

(ii) Provide information supporting the requested determination, including information regarding how the proposed activity falls into one of the categories listed in paragraph (a)(1) of this section, and any other information required by the Secretary concerning the proposed activity.

(b) [Reserved]

Dated: December 27, 2000.

Gregory A. Baer,

*Assistant Secretary for Financial Institutions,
Department of the Treasury.*

[FR Doc. 01-42 Filed 1-2-01; 8:45 am]

BILLING CODE 6210-10-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM181; Special Conditions No. 25-171-SC]

Special Conditions: Dassault Aviation Mystere-Falcon 50; High-Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for Dassault Aviation Mystere-Falcon 50 airplanes modified by Garrett Aviation Services. These modified airplanes will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The modification incorporates the installation of dual attitude heading reference systems that perform critical functions. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity-radiated fields (HIRF). These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: The effective date of these special conditions is December 20, 2000. Comments must be received on or before February 2, 2001.

ADDRESSES: Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attention: Rules Docket (ANM-114), Docket No. NM181, 1601 Lind Avenue SW., Renton, Washington 98055-4056; or delivered in duplicate to the Transport Airplane Directorate at the above address. All comments must be marked: Docket No. NM181. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

FOR FURTHER INFORMATION CONTACT: Meghan Gordon, FAA, Standardization Branch, ANM-113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98055-4056; telephone (425) 227-2138; facsimile (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA has determined that good cause exists for making these special conditions effective upon issuance; however, interested persons are invited to submit such written data, views, or arguments, as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified above. The Administrator will consider all communications received on or before the closing date for comments. These special conditions may be changed in light of the comments received. All comments received will be available in the Rules Docket for examination by interested persons, both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerning this rulemaking will be filed in the docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to these special conditions must include a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. NM181." The postcard will be date stamped and returned to the commenter.

Background

On November 1, 2000, Garrett Aviation Services, 1200 North Airport Drive Capital Airport, Springfield, IL, applied for a Supplemental Type Certificate (STC) to modify Dassault Aviation Mystere-Falcon 50 airplanes. The Model Falcon 50 is a small transport category airplane, powered by three AlliedSignal Model TFE 731-3-1C turbofans with a maximum takeoff weight of 38,800 pounds. This airplane operates with a 2-pilot crew and can hold up to 19 passengers. The modification incorporates the installation of dual Collins AHS-3000 Attitude Heading Reference Systems. The AHS-3000 is a replacement for the existing electro-mechanical vertical and directional gyro's, while also providing additional functional capability and redundancy in the system. The avionics/electronics and electrical systems installed in this airplane have the potential to be vulnerable to high-intensity radiated fields (HIRF) external to the airplane.

Type Certification Basis

Under the provisions of 14 CFR 21.101, Garrett Aviation Services must show that the Dassault Aviation Mystere-Falcon 50 airplanes, as changed, continue to meet the applicable provisions of the regulations

incorporated by reference in Type Certificate No. A46EU, or the applicable regulations in effect on the date of application for the change. The regulations incorporated by reference in the type certificate are commonly referred to as the "original type certification basis." The regulations included in the certification basis for the Dassault Aviation Mystere-Falcon 50 airplanes include Title 14, Code of Federal Regulations (14 CFR) part 25, as amended by Amendments 25-1 through 25-34, plus additional requirements listed in the type certificate data sheet that are not relevant to these special conditions.

If the Administrator finds that the applicable airworthiness regulations (i.e., part 25, as amended) do not contain adequate or appropriate safety standards for an airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

In addition to the applicable airworthiness regulations and special conditions, these Dassault Aviation Mystere-Falcon 50 airplanes must comply with the fuel vent and exhaust emission requirements of part 34 and the noise certification requirements of part 36.

Special conditions, as appropriate, are issued in accordance with § 11.49, after public notice, as required by §§ 11.28 and 11.29(b), and become part of the type certification basis in accordance with § 21.101(b)(2).

Special conditions are initially applicable to the model for which they are issued. Should Garrett Aviation Services apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same novel or unusual design feature, these special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

As noted earlier, the Dassault-Aviation Mystere-Falcon airplanes modified by Garrett Aviation Services will incorporate a new attitude heading reference system that will perform critical functions. This system may be vulnerable to high-intensity radiated fields external to the airplane. The current airworthiness standards of part 25 do not contain adequate or appropriate safety standards for the protection of this equipment from the adverse effects of HIRF. Accordingly, this system is considered to be a novel or unusual design feature.

Discussion

There is no specific regulation that addresses protection requirements for electrical and electronic systems from HIRF. Increased power levels from ground-based radio transmitters and the growing use of sensitive avionics/electronics and electrical systems to command and control airplanes have made it necessary to provide adequate protection.

To ensure that a level of safety is achieved that is equivalent to that intended by the regulations incorporated by reference, special conditions are needed for the Dassault Aviation Mystere Falcon 50 airplanes modified by Garrett Aviation Services. These special conditions require that new avionics/electronics and electrical systems that perform critical functions be designed and installed to preclude component damage and interruption of function due to both the direct and indirect effects of HIRF.

High-Intensity Radiated Fields (HIRF)

With the trend toward increased power levels from ground-based transmitters, plus the advent of space and satellite communications coupled with electronic command and control of the airplane, the immunity of critical avionics/electronics and electrical systems to HIRF must be established.

It is not possible to precisely define the HIRF to which the airplane will be exposed in service. There is also uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling of electromagnetic energy to cockpit-installed equipment through the cockpit window apertures is undefined. Based on surveys and analysis of existing HIRF emitters, an adequate level of protection exists when compliance with the HIRF protection special condition is shown with either paragraph 1 or 2 below:

1. A minimum threat of 100 volts rms per meter electric field strength from 10 KHz to 18 GHz.

a. The threat must be applied to the system elements and their associated wiring harnesses without the benefit of airframe shielding.

b. Demonstration of this level of protection is established through system tests and analysis.

2. A threat external to the airframe of the following field strengths for the frequency ranges indicated. Both peak and average field strength components from the Table are to be demonstrated.

Frequency	Field strength (volts per meter)	
	Peak	Average
10 kHz–100 kHz	50	50
100 kHz–500 kHz	50	50
500 kHz–2 MHz	50	50
2 MHz–30 MHz	100	100
30 MHz–70 MHz	50	50
70 MHz–100 MHz	50	50
100 MHz–200 MHz	100	100
200 MHz–400 MHz	100	100
400 MHz–700 MHz	700	50
700 MHz–1 GHz	700	100
1 GHz–2 GHz ...	2000	200
2 GHz–4 GHz ...	3000	200
4 GHz–6 GHz ...	3000	200
6 GHz–8 GHz ...	1000	200
8 GHz–12 GHz	3000	300
12 GHz–18 GHz	2000	200
18 GHz–40 GHz	600	200

The field strengths are expressed in terms of peak of the root-mean-square (rms) over the complete modulation period.

The threat levels identified above are the result of an FAA review of existing studies on the subject of HIRF, in light of the ongoing work of the Electromagnetic Effects Harmonization Working Group of the Aviation Rulemaking Advisory Committee.

Applicability

As discussed above, these special conditions are applicable to Dassault Aviation Mystere-Falcon 50 airplanes modified by Garrett Aviation Services. Should Garrett Aviation Services apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

Conclusion

This action affects only certain novel or unusual design features on the Dassault Aviation Mystere-Falcon 50 airplanes modified by Garrett Aviation Services. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance

contained herein. For this reason, and because a delay would significantly affect the certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the supplemental type certification basis for Dassault Aviation Mystere-Falcon 50 airplanes modified by Garrett Aviation Services.

1. *Protection from Unwanted Effects of High-Intensity Radiated Fields (HIRF).* Each electrical and electronic system that performs critical functions must be designed and installed to ensure that the operation and operational capability of these systems to perform critical functions are not adversely affected when the airplane is exposed to high-intensity radiated fields.

2. For the purpose of these special conditions, the following definition applies: *Critical Functions:* Functions whose failure would contribute to or cause a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Renton, Washington, on December 20, 2000.

Donald L. Riggins,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 01-89 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-190-AD; Amendment 39-12057; AD 2000-26-07]

RIN 2120-AA64

Airworthiness Directives; British Aerospace Model BAe 146 and Model Avro 146-RJ Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all British Aerospace Model BAe 146 and Model Avro 146-RJ series airplanes, that requires revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures. This amendment is prompted by issuance of a revision to the airworthiness limitations of the BAe/Avro 146 Aircraft Maintenance Manual, which specifies new inspections and compliance times for inspection and replacement actions. The actions specified by this AD are intended to ensure that fatigue cracking of certain structural elements is detected and corrected; such fatigue cracking could adversely affect the structural integrity of these airplanes.

DATES: Effective February 7, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all British Aerospace Model BAe 146 and Model Avro 146-RJ series airplanes was published in the **Federal Register** on

October 30, 2000 (65 FR 64638). That action proposed to require revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 45 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$2,700, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a

substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

2000-26-07 British Aerospace Regional Aircraft (Formerly British Aerospace Regional Aircraft Limited, Avro International Aerospace Division; British Aerospace, PLC; British Aerospace Commercial Aircraft Limited): Amendment 39-12057. Docket 99-NM-190-AD.

Applicability: All Model BAe 146 and Model Avro 146-RJ series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure continued structural integrity of these airplanes, accomplish the following:

Airworthiness Limitations Revision

(a) Within 30 days after the effective date of this AD, revise the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness by incorporating Section 05-10-01, Revision 65, dated August 3, 1999, of Chapter 5 of the

BAe/Avro 146 Aircraft Maintenance Manual (AMM), into the ALS. This section references other sections of the AMM. The applicable revision level of the referenced sections is that in effect on the effective date of this AD.

(b) Except as specified in paragraph (c) of this AD: After the actions specified in paragraph (a) of this AD have been accomplished, no alternative inspections or inspection intervals may be approved for the structural elements specified in the document listed in paragraph (a) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on February 7, 2001.

Issued in Renton, Washington, on December 22, 2000.

John J. Hickey,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-29 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-250-AD; Amendment 39-12058; AD 2000-26-08]

RIN 2120-AA64

Airworthiness Directives; British Aerospace (Jetstream) Model 4101 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all British Aerospace (Jetstream) Model 4101 airplanes, that

requires revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures. This amendment is prompted by issuance of a revision to the airworthiness limitations of the British Aerospace J41 Aircraft Maintenance Manual. The actions specified by this AD are intended to ensure that fatigue cracking of certain structural elements is detected and corrected; such fatigue cracking could adversely affect the structural integrity of these airplanes.

DATES: Effective February 7, 2001.

ADDRESSES: Information pertaining to this amendment may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all British Aerospace (Jetstream) Model 4101 airplanes was published in the **Federal Register** on October 20, 2000 (65 FR 63023). That action proposed to require revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 59 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish

the proposed actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$3,540, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

2000-26-08 British Aerospace Regional Aircraft [Formerly Jetstream Aircraft Limited; British Aerospace (Commercial Aircraft) Limited]: Amendment 39-12058. Docket 99-NM-250-AD.

Applicability: All Model Jetstream 4101 airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure continued structural integrity of these airplanes, accomplish the following:

Airworthiness Limitations Revision

(a) Within 30 days after the effective date of this AD, revise the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness by incorporating Section 05-10-10, "Airworthiness Limitations Description and Operation," dated July 15, 1999, of the British Aerospace J41 Aircraft Maintenance Manual (AMM) into the ALS.

(b) Except as provided by paragraph (c) of this AD: After the actions specified in paragraph (a) of this AD have been accomplished, no alternative inspections or inspection intervals may be approved for the structural elements specified in the document listed in paragraph (a) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a

location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on February 7, 2001.

Issued in Renton, Washington, on December 22, 2000.

John J. Hickey,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-30 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97-NM-201-AD; Amendment 39-12059; AD 2000-26-09]

RIN 2120-AA64

Airworthiness Directives; Dornier Model 328-100 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Dornier Model 328-100 series airplanes, that requires revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures. This amendment is prompted by issuance of new revisions to the Dornier 328 Airworthiness Limitations Document. The actions specified by this AD are intended to ensure that fatigue cracking of certain structural elements is detected and corrected; such fatigue cracking could adversely affect the structural integrity of these airplanes.

DATES: Effective February 7, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Fairchild Dornier, Dornier Luftfahrt GmbH, P.O. Box 1103, D-82230 Wessling, Germany. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Dornier Model 328–100 series airplanes was published in the **Federal Register** on October 17, 2000 (65 FR 61287). That action proposed to require revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 50 Dornier Model 328–100 series airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the required AD on U.S. operators is estimated to be \$3,000, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time

necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

2000–26–09 Dornier Luftfahrt GMBH:

Amendment 39–12059. Docket 97–NM–201–AD.

Applicability: All Model 328–100 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure continued structural integrity of these airplanes, accomplish the following:

Airworthiness Limitations Revision

(a) Within 30 days after the effective date of this AD, revise the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness by incorporating Revision 13 of the Dornier 328 Airworthiness Limitations Document (ALD), TM–ALD–010693–ALL, dated July 25, 1997, and the Temporary Revision (TR) documents into the Airworthiness Limitations Section (ALS) listed in the following table:

TR number	Date of issue
TR ALD–042	January 31, 1997
TR ALD–048	May 12, 1998
TR ALD–050	October 2, 1997
TR ALD–052	December 11, 1997
TR ALD–053	April 29, 1998
TR ALD–054	May 12, 1998
TR ALD–055	May 26, 1998
TR ALD–056	July 22, 1998
TR ALD–057	October 23, 1998
TR ALD–059	December 11, 1998
TR ALD–062	May 18, 1999
TR ALD–063	August 10, 1999
TR ALD–064	October 10, 1999
TR ALD–065	November 26, 1999
TR ALD–067	February 7, 2000
TR ALD–068	February 4, 2000
TR ALD–070	May 25, 2000

Note 2: When the TR documents have been incorporated into the latest issue of the general revisions of the ALD, the general revisions may be incorporated into the ALS, provided that the information contained in the general revisions is identical to that specified in the TR documents.

(b) Except as provided in paragraph (c) of this AD: After the actions specified in paragraph (a) of this AD have been accomplished, no alternative inspections or inspection intervals may be approved for the structural elements specified in the documents listed in paragraph (a) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on February 7, 2001.

Issued in Renton, Washington, on December 22, 2000.

John J. Hickey,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-31 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-249-AD; Amendment 39-12060; AD 2000-26-10]

RIN 2120-AA64

Airworthiness Directives; BAe Systems (Operations) Limited Model ATP Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD),

applicable to all BAe Systems (Operations) Limited Model ATP airplanes, that requires revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures. This amendment is prompted by issuance of a revision to the airworthiness limitations of the British Aerospace ATP Aircraft Maintenance Manual, which specifies new inspections and compliance times for inspection and replacement action. The actions specified by this AD are intended to ensure that fatigue cracking of certain structural elements is detected and corrected; such fatigue cracking could adversely affect the structural integrity of these airplanes.

DATES: Effective February 7, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all British Aerospace BAe Model ATP airplanes was published in the **Federal Register** on October 24, 2000 (65 FR 63556). That action proposed to require revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate life limits for certain items and inspections to detect fatigue cracking in certain structures.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposed rule or the FAA's determination of the cost to the public.

Manufacturer Name Change

The manufacturer name in the final rule has been changed from British Aerospace to BAe Systems (Operations)

Limited to reflect the recent company name change.

Conclusion

After careful review of the available data, the FAA has determined that air safety and the public interest require the adoption of the rule with the change described previously. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

The FAA estimates that 10 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$600, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

2000–26–10 BAe Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft): Amendment 39–12060. Docket 99–NM–249–AD.

Applicability: All Model ATP airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure continued structural integrity of these airplanes, accomplish the following:

Airworthiness Limitations Revision

(a) Within 30 days after the effective date of this AD, revise the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness by incorporating Section 05–00–00, dated August 15, 1997, of the British Aerospace ATP Aircraft Maintenance Manual (AMM), dated October 15, 1999, into the ALS. This section references other chapters of the AMM. The applicable revision level of the referenced chapters is that in effect on the effective date of this AD.

(b) Except as provided by paragraph (c) of this AD: After the actions specified in paragraph (a) of this AD have been accomplished, no alternative inspections or inspection intervals may be approved for the structural elements specified in the document listed in paragraph (a) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM–116.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM–116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on February 7, 2001.

Issued in Renton, Washington, on December 22, 2000.

John J. Hickey,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01–32 Filed 1–2–01; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF THE TREASURY**Internal Revenue Service****26 CFR Part 1**

[TD 8916]

RIN 1545–AY29

Application of Section 904 to Income Subject to Separate Limitations and Section 864(e) Affiliated Group Expense Allocation and Apportionment Rules

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final and temporary regulations.

SUMMARY: This document contains Income Tax Regulations relating to the section 864(e)(5) and (6) rules on affiliated group interest and other expense allocation and apportionment and to the section 904(d) foreign tax credit limitation. Changes to the applicable laws were made by the Tax Reform Act of 1986, the Technical and Miscellaneous Revenue Act of 1988, the Revenue Reconciliation Act of 1993, and the Taxpayer Relief Act of 1997. These regulations provide guidance

needed to comply with those changes and affect individuals and corporations claiming foreign tax credits.

DATES: *Effective Date:* These regulations are effective January 3, 2001.

Applicability Dates: The specific dates of applicability of these regulations are as follows:

The amendments to §§ 1.861–9, 1.861–11, and 1.861–14 generally apply to taxable years beginning after December 31, 1989. The dates of applicability are stated in § 1.861–9(h)(5)(i) and (ii), § 1.861–11(d)(8), and § 1.861–14(d)(1), (d)(2)(i), and (d)(2)(ii). The amendment to § 1.904–4(b)(1)(i) applies to taxable years beginning after December 31, 1992.

The amendments to § 1.904–4(e)(3)(ii) and (e)(3)(iv) apply to taxable years beginning after December 31, 2000.

The amendments to § 1.902–1(d)(3)(ii), § 1.904–4(c)(5)(v), (c)(6)(iv), (c)(7)(ii), (c)(7)(iii), (c)(8) Example 9, and (g)(3), and to § 1.904–5(d)(2) and (m) apply to taxable years beginning after December 31, 1986. However, for taxable years beginning before January 1, 2001, taxpayers may rely on § 1.904–4(c)(6)(iv) and (g)(3)(ii), (iii), and (iv) of regulations project REG–209527–92, INTL–1–92, published at 1992–1 C.B. 1209. See § 601.601(d)(2) of 26 CFR part 601 revised April 1, 2000.

The amendments to § 1.904–5(a)(3), (g), (h)(4), and (i)(1), (3), and (4) apply to taxable years beginning after December 31, 2000. However, taxpayers may choose to apply the rule of § 1.904–5(i)(3) in taxable years beginning after December 31, 1991, provided that the taxpayer makes appropriate adjustments to eliminate any double benefit arising from the application of the rule to taxable years that are not open for assessment.

ADDRESSES: Send submissions to: Regulations Unit CC (REG–106409–00), room 5226, Internal Revenue Service, POB 7604, Ben Franklin Station, Washington, DC 20044. In the alternative, submissions may be hand-delivered between the hours of 8 a.m. and 5 p.m. to Regulations Unit CC (REG–106409–00), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, DC or sent electronically, via the IRS Internet site at: http://www.irs.gov/tax_regs/regslst.html.

FOR FURTHER INFORMATION CONTACT: Bethany A. Ingwalson at (202) 622–3850 (not a toll-free number).

SUPPLEMENTARY INFORMATION:**Background**

On May 14, 1992, a notice of proposed rulemaking (INTL–1–92,

1992-1 C.B. 1209) was published in the **Federal Register** (57 FR 20660), proposing amendments to the temporary Income Tax Regulations (26 CFR part 1) under section 864(e)(5) and (6) and to the Income Tax Regulations (26 CFR part 1) under section 904(d). The proposed regulations under section 864(e)(5) and (6) concern the allocation and apportionment of interest expense and certain other expenses within an affiliated group for alternative minimum tax purposes. The proposed regulations under section 904(d) provide rules for determining a taxpayer's foreign tax credit limitation.

Also on May 14, 1992, final regulations (TD 8412, 1992-1 C.B. 271) under section 904(d) of the Internal Revenue Code of 1986 (Code) were published in the **Federal Register** (57 FR 20639). The final regulations added provisions that were reserved in final regulations (TD 8214, 1988-2 C.B. 220) published in the **Federal Register** (53 FR 27006) in 1988 and also made other changes to the 1988 final regulations. Written comments were received with respect to the final and proposed regulations and a public hearing was held on September 24, 1992.

On July 8, 1996, additional proposed amendments to the Income Tax Regulations under section 904 (REG-209750-95, 1996-2 C.B. 484) were published in the **Federal Register** (61 FR 35696), addressing the grouping rules under § 1.904-4(c). On January 11, 1999, final regulations (TD 8805, 1999-1 C.B. 371) were published in the **Federal Register** (64 FR 1505) finalizing these amendments and portions of the 1992 proposed regulations, with modifications.

The significant points raised by the comments to the 1992 final and proposed regulations and at the hearing, and the changes made to the proposed, temporary, and final regulations, are discussed in the remainder of the preamble. After consideration of the comments received, the below-described amendments to the 1992 final regulations under section 904 and to the final regulations under section 864 are adopted as modified by this Treasury decision.

Explanation of Provisions

I. Sections 1.861-9, 1.861-11, and 1.861-14

The proposed regulations under §§ 1.861-9, 1.861-11, and 1.861-14 are finalized substantially as proposed, and the corresponding provisions of the temporary regulations are removed. For purposes of the alternative minimum tax (AMT), for taxable years beginning

after December 31, 1989, the dividends received deduction under section 243 does not apply to the portion of a dividend attributable to income that is exempt from tax under section 936 or 30A. See section 56(g)(4)(C). Therefore, the exempt portion of the dividend is, in effect, included in adjusted current earnings (ACE) for purposes of computing the dividend recipient's alternative minimum taxable income. Dividends from a corporation with respect to which an election is in effect under section 936 or 30A (a section 936 corporation) are eligible for the dividends received deduction for regular tax purposes. Section 243(b)(1)(B)(ii).

To the extent included in income, dividends from a section 936 corporation to an affiliated United States corporation do not qualify for look-through treatment under section 904(d)(3) and § 1.904-5. Under sections 904, 861(a)(2)(A), and 862(a)(2), such amounts generally are treated as foreign source passive income (except as otherwise provided in section 904(g)). For taxable years beginning after December 31, 1993, section 56(g)(4)(C)(iii)(IV), added to the Code as part of the Revenue Reconciliation Act of 1993 (Pub. L. 103-66, 107 Stat. 312)(RRA 1993), creates an AMT foreign tax credit separate limitation for dividend income attributable to income that is exempt from tax under section 936 or 30A. The separate limitation applies solely for AMT purposes.

Thus, for taxable years beginning after December 31, 1989, and before January 1, 1994, the portion of the dividends from section 936 corporations that are added back into alternative minimum taxable income as ACE adjustments are subject to the separate limitation for passive income under section 904(d)(2) for AMT foreign tax credit purposes. For taxable years beginning after December 31, 1993, dividends from section 936 corporations are subject to a separate AMT foreign tax credit limitation. In addition, for taxable years beginning after December 31, 1995, corporations eligible for a credit under section 30A are treated as section 936 corporations, under sections 30A(e) and 56(g)(4)(C)(iii)(VI).

Treasury and the IRS proposed changes to the temporary regulations in order to exclude section 936 corporations from the affiliated group solely for purposes of allocating expenses in determining the amount of the group's foreign source alternative minimum taxable income, which affects the AMT foreign tax credit. This change has the effect of increasing the amount of interest and other expenses

apportioned to dividend income from a section 936 corporation. The regulations were intended to mitigate the treatment, for AMT foreign tax credit purposes, of section 936 corporation dividends as passive income and would similarly mitigate the treatment of such dividends as separate limitation income in post-1993 taxable years.

Commentators wrote and testified at the public hearing that Treasury and the IRS do not have statutory authority to issue regulations under section 864(e)(5) excluding section 936 corporations from the affiliated group solely for AMT purposes. They contended that the AMT and regular tax systems must remain parallel unless a deviation is appropriate for simplification purposes. However, the enactment of a separate limitation category for certain portions of dividends from section 936 corporations for AMT purposes, effective for taxable years beginning after 1993, demonstrates that, because of the ACE adjustment, the AMT and regular tax foreign tax credit systems cannot operate exactly alike with respect to dividend income from section 936 corporations.

The amendments were proposed to apply to taxable years beginning after December 31, 1991. In response to a comment, the applicability date of the amendments to the regulations under §§ 1.861-9, 1.861-11, and 1.861-14 has been changed to taxable years beginning after December 31, 1989, to conform to the effective date of the statutory change. The regulations also provide a definition of section 936 corporations that reflects the enactment of section 30A.

In addition, the regulations move the flush text at the end of § 1.861-11T(d)(6) to a new § 1.861-11(d)(7). The new paragraph (d)(7) provides, among other things, that the attribution rules of section 1563(e) rather than the rules of section 318 will apply to determine indirect ownership for purposes of § 1.861-11T(d)(6). The change in the regulations to refer to section 1563(e) is consistent with paragraph 7 of Notice 89-91 (1989-2 C.B. 408), which stated that the IRS intends that the reference in § 1.861-11T(d)(6) to section 318 should instead be a reference to section 1563(e), effective for all post-1986 taxable years.

II. Section 1.904

A. Changes to the 1992 Proposed Regulations

1. Distributions From Controlled Foreign Corporations That Are Not Eligible for Look-Through Treatment

Section 1.904-4(g)(3)(i) provides that distributions made by a controlled foreign corporation (CFC) from earnings and profits accumulated before the distributing corporation became a CFC are treated as dividends from a noncontrolled section 902 corporation. The final regulations reorganize the provisions of § 1.904-4(g)(3) and include a reserved paragraph at § 1.904-4(g)(3)(i)(C). The regulations are proposed to be amended in a separate document (REG-104683-00) published elsewhere in this issue of the **Federal Register** to address the effect of an intervening period when the corporation was not a CFC on the eligibility of the distributions for look-through treatment.

Prior to amendment by the Taxpayer Relief Act of 1997 (Public Law 105-34, 107 Stat. 312) (TRA 1997), section 904(d)(2)(E)(i) provided that a CFC would not be treated as a noncontrolled section 902 corporation with respect to distributions from earnings and profits that were accumulated while the corporation was a CFC and, except as provided in regulations, the taxpayer was a United States shareholder in such corporation. The rule limiting look-through treatment to earnings and profits accumulated while the taxpayer was a United States shareholder was repealed by TRA 1997, applicable for distributions after August 5, 1997.

With respect to distributions before August 6, 1997, § 1.904-4(g)(3)(ii) through (iv) of the proposed regulations significantly limited the circumstances under which a dividend paid to a new United States shareholder by a CFC out of earnings and profits accumulated while it was a CFC (but before the recipient became a United States shareholder) would be treated as dividends from a noncontrolled section 902 corporation. The final regulations at § 1.904-4(g)(3)(ii)(A) retain the proposed rule denying look-through treatment only to new United States shareholders that acquire more than 90 percent of a CFC. This rule relaxed the statutory limitation to the extent necessary to avoid the administrative burdens that would arise if more than one United States shareholder were entitled to look-through treatment on distributions of post-1986 undistributed earnings but the look-through pools for

each new shareholder began in different years.

Commentators argued that the regulations should be further expanded to allow look-through on pre-acquisition earnings for all new shareholders that acquire at least 10 percent of the voting power of the stock of a CFC, that is, to all new shareholders entitled to compute a credit for deemed-paid taxes under section 902 and section 960. Treasury and the IRS declined to adopt the suggestion, because the proposed regulations already relaxed the statutory requirement to an appropriate extent.

A commentator suggested that the intra-group acquisition rule in § 1.904-4(g)(3)(ii)(C) of the proposed regulations (paragraph (g)(3)(ii)(B) of the final regulations) should be revised to apply when the new and old shareholders of a CFC are related under the attribution rules of sections 318 and 958, rather than only to transfers within an affiliated group. Other commentators requested that the exception be expanded to apply to nontaxable transfers of stock in which the new and old shareholders cease to be members of the same affiliated group. Treasury and the IRS decline to expand the scope of the intra-group exception to the 90-percent shareholder rule, which applies only for distributions prior to August 6, 1997. The final regulations clarify the rule of the proposed regulations that the dividend recipient and the immediately preceding owner (or owners) must be members of the same affiliated group both when the recipient acquires the stock of the distributing corporation from the immediately preceding owner and when the recipient receives the dividend.

In response to a comment, the regulations clarify the LIFO ordering rule in § 1.904-4(g)(3)(iii) of the proposed regulations (paragraph (g)(3)(ii)(C) of the final regulations) for determining whether a distribution from a CFC is attributable to the period after a more-than-90-percent United States shareholder became a United States shareholder. The final regulations state that such a distribution comes first from the pool of post-acquisition undistributed earnings, next from the 10/50 pool of post-1986 undistributed earnings attributable to the pre-acquisition period, if any, and finally on a LIFO basis from any pre-acquisition earnings and profits attributable to pre-1987 accumulated profits.

To reflect the amendments made to section 904(d)(2)(E)(i) by TRA 1997, the final regulations provide at § 1.904-4(g)(3)(ii)(D) that the denial of look-through treatment to new more-than-90-percent shareholders for distributions of

earnings and profits accumulated before the recipient became a United States shareholder applies only to distributions made before August 6, 1997. Section 1.904-4(g)(3) has been reorganized to separate the rules under section 904(d)(2)(E) that are applicable to distributions after August 5, 1997, from the rules that are applicable only to distributions on or before that date.

Rules substantially identical to the proposed section 904 regulations were proposed in 1995 under section 902. See Prop. Reg. § 1.902-1(d)(2)(ii) through (iv) (69 FR 2049; 1995-1 C.B. 959, 970), and the reserved paragraph at § 1.902-1(d)(3)(ii)(1997). A commentator noted that the effective date included in the proposed section 902 regulations applied to taxable years beginning after December 31, 1986, while the proposed applicability date for the substantially identical regulations proposed under section 904(d) applied to taxable years beginning after December 31, 1991. Since section 904(d)(2)(E)(i) applies to all taxable years beginning after 1986, the final regulations adopt the earlier applicability date, and amend the reserved paragraph at § 1.902-1(d)(3)(ii) to add a cross reference to the final section 904 regulations.

2. Succeeding Shareholders' Treatment of Additional Taxes on Previously Taxed Income Recognized by Prior Shareholders

In response to a comment, § 1.904-4(c)(6)(iv) of the proposed regulations is revised. Section 1.904-4(c)(6) provides rules for applying the high-tax kick-out from the passive limitation category when additional taxes are paid or deemed paid with respect to a distribution of previously taxed passive income that had been included in income in an earlier year under section 951(a)(1). Paragraph (c)(6)(iv) applies when a new shareholder acquires stock in a controlled foreign corporation after income has been included in the prior shareholder's income under section 951(a)(1) but before the income is distributed and subjected to additional foreign tax.

As proposed, paragraph (c)(6)(iv) provided that new shareholders entitled to look-through treatment on distributions of pre-acquisition earnings (U.S. shareholders that acquired 90 percent or less of the distributing corporation) would place the additional taxes in the general limitation category. However, new shareholders who were not entitled to look-through treatment (because the shareholder acquired more than 90 percent of the distributing corporation) would place the taxes in the general limitation or noncontrolled

section 902 corporation category, depending on whether or not the associated income inclusion of the prior shareholder was high-taxed income.

A commentator argued that the latter rule's dependence on whether income was high-taxed or not in the hands of the previous shareholder, for purposes of determining the treatment of the taxes in the hands of a new 90-percent shareholder, added unnecessary complexity. In response to the comment, the regulations amend § 1.904-4(c)(6)(iv) to provide that a shareholder not entitled to look-through on pre-acquisition earnings must treat the additional taxes as allocable to the noncontrolled section 902 corporation dividend category. The revised rule applies to taxable years beginning after December 31, 1991. However, taxpayers may rely on the proposed regulations for taxable years beginning before January 1, 2001.

The final regulations adopt the proposed rule that a shareholder entitled to look-through treatment on pre-acquisition earnings treats additional taxes imposed on distributions of previously taxed passive income as allocable to the general limitation category. This rule applies to all distributions of previously taxed passive income after August 5, 1997.

3. Special Rules for Dividends Between CFCs

Section 1.904-5(i)(3) of the proposed regulations, reducing to ten percent the common ownership threshold for dividends between CFCs to qualify for look-through treatment, is finalized as proposed, applicable to taxable years beginning after December 31, 2000. However, taxpayers may choose to apply the rule to taxable years beginning after December 31, 1991, so long as appropriate adjustments are made to eliminate any double benefit arising from the application of the rule to taxable years that are not open for assessment. *Example 2* of proposed § 1.904-5(i)(4) is also finalized, with modifications described in II B.4 of this preamble, below, relating to changes to correct errors in *Example 1* in the 1992 final regulations.

B. Changes to the 1992 Final Regulations

1. Passive Limitation FOGEI Income

Section 1.904-4(b)(1)(i) is amended to clarify that, for taxable years beginning after December 31, 1992, passive income does not exclude foreign oil and gas extraction income (as defined in section 907(c)). This amendment reflects the repeal of section 904(d)(2)(A)(iii)(IV),

which excluded FOGEI from the definition of passive income, by section 13235(a)(2) of RRA 1993.

2. High-Tax Kickout

Section 1.904-4(c)(4)(ii) is revised to reflect the addition of § 1.904-4(c)(3)(iv).

3. Reduction in Tax on Distribution of Previously Taxed Income

The 1992 final regulations, which generally look to foreign law rules for purposes of determining the year or years to which a reduction in foreign tax relates, were intended to apply LIFO default rules in order to avoid multiple redeterminations under section 905(c) in situations where a tax reduction applies to a distribution of previously taxed income that is treated under foreign law as made out of a multi-year pool of income. See § 1.905-3T(f) (requiring a redetermination of deemed paid taxes, in lieu of a pooling adjustment, when corporate tax is reduced in connection with a distribution of previously taxed income).

In response to a comment, § 1.904-4(c)(7)(ii) and § 1.904-4(c)(8) *Example 9* are revised to clarify that if a foreign country's law allocates a foreign tax reduction to a pool or group containing income from more than one taxable year, and that pool or group is defined based on a characteristic of the income (for example, the rate of tax paid with respect to the income) rather than based on the taxable year in which the income is derived, then foreign law is not considered to specify a year or years to which the tax reduction applies and the last-in first-out (LIFO) default rule applies.

In response to a comment, a new paragraph (c)(5)(v) has been added to § 1.904-4 to supply a cross-reference to the rule that, pursuant to the general rule of section 904(d)(3)(E), passive income excluded from foreign personal holding company income under the subpart F high tax exception of section 954(b)(4) will be treated as general limitation income at the CFC level unless the special rule in § 1.904-4(c)(7)(iii) applies.

4. Examples Illustrating Look-Through Rules for Dividends and Interest

In response to comments, § 1.904-5(i)(4) *Example 1* and Prop. § 1.904-5(i)(4) *Example 2* are revised. The 1992 version of *Example 1* was erroneous because, although the first-tier CFC in that example owns only 40 percent of the second-tier CFC, the second-tier CFC owns 100 percent of the third-tier CFC. Therefore, the second- and third-tier

CFCs are related look-through entities and the look-through rules of § 1.904-5(i)(1) apply to interest payments between them. The section 904(d)(3)(B) look-through rule for subpart F inclusions applies to the U.S. parent's recognition of subpart F income of the second-tier CFC, attributable to the interest paid by the third-tier CFC.

Example 2 of the proposed regulations reached the correct result but applied an incorrect rationale. Just as in *Example 1*, on the facts of proposed *Example 2*, the related look-through entity rules of § 1.904-5(i)(1) would apply to distributions between the second- and third-tier CFCs even without the application of the special rule for dividends in proposed § 1.904-5(i)(3). *Examples 1* and *2* are revised to illustrate the different ownership thresholds that are required in order for the look-through rules to apply to interest and dividends paid between CFCs. The regulations also add a new *Example 3* to further clarify the application of § 1.904-5(i).

5. Treatment of Section 951(a)(1)(B) Inclusions as Dividends

Paragraph (m)(4) of § 1.904-5 is amended to clarify that, for purposes of the section 904(g) re-sourcing rules, section 951(a)(1)(B) inclusions are treated as dividends sourced under the pro rata rule of section 904(g)(4) and § 1.904-5(m)(4). Section 904(g)(2) provides a rule for sourcing section 951(a) inclusions, which literally include section 956 inclusions described in section 951(a)(1)(B). Section 904(g)(2) treats an amount described in section 951(a) as U.S. source income to the extent it is attributable to items of U.S. source income of the foreign corporation. Inclusions under section 951(a)(1)(A) are measured by tracing the inclusion directly to the items of income received by a CFC. Like an actual dividend, an increase in earnings invested in U.S. property that is included in income under section 951(a)(1)(B) is treated as paid pro rata out of all of the CFC's earnings and profits. See § 1.904-5(c)(4)(i). The final regulations amend § 1.904-5(m)(4)(i) to clarify that section 904(g)(2) sources section 951(a)(1)(B) inclusions by applying the pro rata rules of section 904(g)(4).

6. Treatment of Base Differences in the Case of Financial Services Entities

A commentator requested that § 1.904-6(a)(1)(iv) be revised to provide that, in the case of a financial services entity, if foreign taxes are imposed on amounts that are not income under United States tax rules (a base

difference), the foreign taxes will be placed in the limitation category for financial services income rather than the general limitation category. The commentator argued that financial services entities typically have no general limitation income, and that the financial services category essentially serves as the residual basket for financial services entities.

Treasury and the IRS decline to adopt the suggested change. Treasury and the IRS believe that most cases in which foreign tax is imposed in the absence of a concurrent associated income inclusion in the United States are properly analyzed as involving a timing difference rather than a base difference. A timing difference occurs when foreign tax is imposed on an item that would be income under United States tax principles if it were recognized for U.S. tax purposes in the same year. Treasury and the IRS believe that base differences (in which foreign tax is imposed on an amount that the United States would never recognize as income, such as a gift) rarely occur. Accordingly, a special rule for base differences of financial services entities is not required.

However, Treasury and the IRS are considering whether additional rules are needed to clarify the operation of § 1.904-6(a)(1)(iv). For example, Treasury and the IRS are considering whether the regulations should be revised to address explicitly situations in which a foreign country and the United States recognize different amounts of income or characterize the income differently, for example, as a result of differences in calculating basis. Other issues under consideration include the appropriate treatment of situations in which a timing difference occurs but there is more than one possible characterization of the income that might be recognized in the future for U.S. tax purposes, and situations in which the United States and another country perceive different taxpayers as realizing the same income (with or without a timing or characterization difference). Comments are requested on the appropriate scope and content of additional guidance on these types of issues.

Treasury and the IRS are also considering clarifying § 1.904-6(a)(1), which provides rules for allocating foreign taxes to separate categories. The current regulations determine the income to which the foreign taxes relate by reference to foreign law (taxes are related to income if the income is included in the tax base upon which the foreign tax is imposed). Foreign taxes are allocated and apportioned to separate categories by reference to the

separate categories to which the income taxed under foreign law would be assigned under U.S. tax principles. See § 1.904-6(c) *Example 5*. Comments are requested on the manner in which the regulations could be made easier to understand and apply.

Special Analyses

It has been determined that this Treasury decision is not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations, and because the notice of proposed rulemaking preceding the regulations was issued prior to March 29, 1996, the Regulatory Flexibility Act (5 U.S.C. chapter 6) does not apply. Pursuant to section 7805(f) of the Code, the notice of proposed rulemaking preceding these regulations was submitted to the Small Business Administration for comment on its impact on small business.

Drafting Information

The principal author of these final regulations is Rebecca I. Rosenberg of the Office of Associate Chief Counsel (International), within the Office of Chief Counsel, IRS. However, other personnel from the IRS and Treasury Department participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Adoption of Amendments to the Regulations

Accordingly, 26 CFR part 1 is amended as follows:

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 is amended by adding citations for §§ 1.861-9, 1.861-11, and 1.861-14 to read as follows:

Authority: 26 U.S.C. 7805 * * *

Section 1.861-9 also issued under 26 U.S.C. 863(a), 26 U.S.C. 864(e), 26 U.S.C. 865(i), and 26 U.S.C. 7701(f). * * *

Section 1.861-11 also issued under 26 U.S.C. 863(a), 26 U.S.C. 864(e), 26 U.S.C. 865(i), and 26 U.S.C. 7701(f). Section 1.861-14 also issued under 26 U.S.C. 863(a), 26 U.S.C. 864(e), 26 U.S.C. 865(i), and 26 U.S.C. 7701(f). * * *

Par. 2. Section 1.861-9 is added to read as follows:

§ 1.861-9 Allocation and apportionment of interest expense.

(a) through (h)(4) [Reserved]. For further guidance, see § 1.861-9T(a) through (h)(4).

(h)(5) *Characterizing stock in related persons*—(i) *General rule.* Stock in a related person held by the taxpayer or by another related person shall be characterized on the basis of the fair market value of the taxpayer's pro rata share of assets held by the related person attributed to each statutory grouping and the residual grouping under the stock characterization rules of § 1.861-12T(c)(3)(ii), except that the portion of the value of intangible assets of the taxpayer and related persons that is apportioned to the related person under § 1.861-9T(h)(2) shall be characterized on the basis of the net income before interest expense of the related person within each statutory grouping or residual grouping (excluding income that is passive under § 1.904-4(b)).

(ii) *Special rule for section 936 corporations regarding alternative minimum tax.* For purposes of characterizing stock in a related section 936 corporation in determining foreign source alternative minimum taxable income within each separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a), the rules of § 1.861-9T(g)(3) shall apply and § 1.861-9(h)(5)(i) shall not apply. Thus, for taxable years beginning after December 31, 1989, and before January 1, 1994, stock in a related section 936 corporation is characterized for alternative minimum tax purposes as a foreign source passive asset because the stock produces foreign source passive dividend income under sections 861(a)(2)(A), 862(a)(2), and 904(d)(2)(A) and the regulations under those sections. For taxable years beginning after December 31, 1993, stock in a related section 936 corporation would be characterized for alternative minimum tax purposes as an asset subject to the separate limitation for section 936 corporation dividends because the stock produces foreign source dividend income that, for alternative minimum tax purposes, is subject to a separate foreign tax credit limitation under section 56(g)(4)(C)(iii)(IV). However, stock in a section 936 corporation is characterized as a U.S. source asset to the extent required by section 904(g). For the definition of the term *section 936 corporation* see § 1.861-11(d)(2)(ii).

(iii) *Effective date.* This paragraph (h)(5) applies to taxable years beginning after December 31, 1989.

Par. 3. In § 1.861–9T, paragraph (h)(5) is revised to read as follows:

§ 1.861–9T Allocation and apportionment of interest expense (temporary).

* * * * *

(h) * * *
(5) [Reserved]. For further guidance, see § 1.861–9(h)(5).

* * * * *

Par. 4. Section 1.861–11 is added to read as follows:

§ 1.861–11 Special rules for allocating and apportioning interest expense of an affiliated group of corporations.

(a) through (c) [Reserved]. For further guidance, see § 1.861–11T(a) through (c).

(d) *Definition of affiliated group*—(1) *General rule.* For purposes of this section, in general, the term *affiliated group* has the same meaning as is given that term by section 1504, except that section 936 corporations are also included within the affiliated group to the extent provided in paragraph (d)(2) of this section. Section 1504(a) defines an affiliated group as one or more chains of includible corporations connected through 80-percent stock ownership with a common parent corporation which is an includible corporation (as defined in section 1504(b)). In the case of a corporation that either becomes or ceases to be a member of the group during the course of the corporation's taxable year, only the interest expense incurred by the group member during the period of membership shall be allocated and apportioned as if all members of the group were a single corporation. In this regard, assets held during the period of membership shall be taken into account. Other interest expense incurred by the group member during its taxable year but not during the period of membership shall be allocated and apportioned without regard to the other members of the group.

(2) *Inclusion of section 936 corporations*—(i) *Rule*—(A) *In general.* Except as otherwise provided in paragraph (d)(2)(i)(B) of this section, the exclusion of section 936 corporations from the affiliated group under section 1504(b)(4) does not apply for purposes of this section. Thus, a section 936 corporation that meets the ownership requirements of section 1504(a) is a member of the affiliated group.

(B) *Exception for purposes of alternative minimum tax.* The exclusion from the affiliated group of section 936 corporations under section 1504(b)(4) shall be operative for purposes of the application of this section solely in determining the amount of foreign

source alternative minimum taxable income within each separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a). Thus, a section 936 corporation that meets the ownership requirements of section 1504(a) is not a member of the affiliated group for purposes of determining the amount of foreign source alternative minimum taxable income within each separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a).

(ii) *Section 936 corporation defined.* For purposes of this section, § 1.861–9, and § 1.861–14, the term *section 936 corporation* means, for any taxable year, a corporation with an election in effect to be eligible for the credit provided under section 936(a)(1) or section 30A for the taxable year.

(iii) *Example.* This example illustrates the provisions of paragraph (d)(2)(i) of this section:

Example—(A) *Facts.* X owns all of the stock of Y. XY constitutes an affiliated group of corporations within the meaning of section 1504(a) and uses the tax book value method of apportionment. In 2000, Y owns all of the stock of Z, a section 936 corporation. Z manufactures widgets in Puerto Rico. Y purchases these widgets and markets them exclusively in the United States. Of the three corporations, only Z has foreign source income, which includes both qualified possessions source investment income and general limitation income. For purposes of section 904, Z's qualified possessions source investment income constitutes foreign source passive income. In computing the section 30A benefit, Y and Z have elected the cost sharing method. Of the three corporations, only X has debt and, thus, only X incurs interest expense.

(B) *Analysis for regular tax.* Assume first that X has no alternative minimum tax liability. Under paragraph (d)(2) of this section, Z is treated as a member of the XY affiliated group for purposes of allocating and apportioning interest expense for regular tax purposes. As provided in § 1.861–11T(b)(2), section 864(e)(1) and (5) do not apply in computing the combined taxable income of Y and Z under section 936, but these rules do apply in computing the foreign source taxable income of the XY affiliated group. The effect of including Z in the affiliated group is that X, the only debtor corporation in the group, must, under the asset method described in § 1.861–9T(g), apportion a part of its interest expense to foreign source passive income and foreign source general limitation income. This is because the assets of Z that generate qualified possessions source investment income and general limitation income are included in computing the group apportionment fractions. The result is that, under section 904(f), X has an overall foreign loss in both the passive and general limitation categories, which currently offsets domestic income and must be recaptured against any subsequent years' foreign passive income and general limitation income, respectively, under the rules of that section.

(C) *Analysis for alternative minimum tax.* Assume, alternatively, that X is liable to pay the alternative minimum tax. Pursuant to section 59(a), X must compute its alternative minimum tax foreign tax credit as if section 904 were applied on the basis of alternative minimum taxable income instead of taxable income. Under paragraph (d)(2)(i)(B) of this section, for purposes of the apportionment of interest expense in determining alternative minimum taxable income within each limitation category, Z is not considered a member of the XY affiliated group. Thus, the stock (and not the assets) of Z are included in computing the group apportionment fractions. Pursuant to sections 59(g)(4)(C)(iii)(IV), 861(a)(2)(A), and 862(a)(2), dividends paid by a section 936 corporation are foreign source income subject to a separate foreign tax credit limitation for alternative minimum tax purposes. Thus, under § 1.861–9T(g)(3), the stock of Z must be considered attributable solely to the statutory grouping consisting of foreign source dividends from Z. The effect of excluding Z from the affiliated group is that X must apportion a part of its interest expense to the separate category for foreign source dividends from Z in computing alternative minimum taxable income within each separate category. If, as a result, under section 904(f), X has a separate limitation loss or an overall foreign loss in the category for dividends from Z for alternative minimum tax purposes, then that loss must be allocated against X's other income (separate limitation or United States source, as the case may be). The loss must be recaptured in subsequent years under the rules of section 904(f) for purposes of the alternative minimum tax foreign tax credit.

* * *

(iv) *Effective date.* This paragraph (d)(2) applies to taxable years beginning after December 31, 1989.

(d)(3) through (6) [Reserved]. For further guidance see § 1.861–11T(d)(3) through (6).

(7) *Special rules for the application of § 1.861–11T(d)(6).* The attribution rules of section 1563(e) and the regulations under that section shall apply in determining indirect ownership under § 1.861–11T(d)(6). The Commissioner shall have the authority to disregard trusts, partnerships, and pass-through entities that break affiliated status. Corporations described in § 1.861–11T(d)(6) shall be considered to constitute members of an affiliated group that does not file a consolidated return and shall therefore be subject to the limitations imposed under § 1.861–11T(g). The affiliated group filing a consolidated return shall be considered to constitute a single corporation for purposes of applying the rules of § 1.861–11T(g). For taxable years beginning after December 31, 1989, § 1.861–11T(d)(6)(i) shall not apply in determining foreign source alternative minimum taxable income within each

separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a) to the extent that such application would result in the inclusion of a section 936 corporation within the affiliated group. This paragraph (d)(7) applies to taxable years beginning after December 31, 1986.

(e) through (g) [Reserved]. For further guidance, see § 1.861-11T(e) through (g).

Par. 5. Section 1.861-11T is amended by:

1. Revising paragraphs (d)(1) and (d)(2).

2. Removing the concluding text following (d)(6)(ii).

3. Adding paragraph (d)(7).

The revisions and additions read as follows:

§ 1.861-11T Special rules for allocating and apportioning interest expense of an affiliated group of corporations (temporary).

(d)(1) and (2) [Reserved]. For further guidance, see § 1.861-11(d)(1) and (2).

(7) *Special rules for the application of § 1.861-11T(d)(6).* [Reserved]. For special rules for the application of § 1.861-11T(d)(6), see § 1.861-11(d)(7).

Par. 6. Section 1.861-14 is added to read as follows:

§ 1.861-14 Special rules for allocating and apportioning certain expenses (other than interest expense) of an affiliated group of corporations.

(a) through (c) [Reserved]. For further guidance, see § 1.861-14T(a) through (c).

(d) *Definition of affiliated group*—(1) *General rule.* For purposes of this section, the term *affiliated group* has the same meaning as is given that term by section 1504, except that section 936 corporations (as defined in § 1.861-11(d)(2)(ii)) are also included within the affiliated group to the extent provided in paragraph (d)(2) of this section. Section 1504(a) defines an affiliated group as one or more chains of includible corporations connected through 80% stock ownership with a common parent corporation which is an includible corporation (as defined in section 1504(b)). In the case of a corporation that either becomes or ceases to be a member of the group during the course of the corporation's taxable year, only the expenses incurred by the group member during the period of membership shall be allocated and apportioned as if all members of the group were a single corporation. In this regard, the apportionment factor chosen

shall relate only to the period of membership. For example, if apportionment on the basis of assets is chosen, the average amount of assets (tax book value or fair market value) for the taxable year shall be multiplied by a fraction, the numerator of which is the number of months of the corporation's taxable year during which the corporation was a member of the affiliated group, and the denominator of which is the number of months within the corporation's taxable year. If apportionment on the basis of gross income is chosen, only gross income generated during the period of membership shall be taken into account. If apportionment on the basis of units sold or sales receipts is chosen, only units sold or sales receipts during the period of membership shall be taken into account. Expenses incurred by the group member during its taxable year, but not during the period of membership, shall be allocated and apportioned without regard to other members of the group. This paragraph (d)(1) applies to taxable years beginning after December 31, 1989.

(2) *Inclusion of section 936 corporations*—(i) *General rule.* Except as otherwise provided in paragraph (d)(2)(ii) of this section, the exclusion from the affiliated group of section 936 corporations under section 1504(b)(4) does not apply for purposes of this section. Thus, a section 936 corporation that meets the ownership requirements of section 1504(a) is a member of the affiliated group.

(ii) *Exception for purposes of alternative minimum tax.* The exclusion from the affiliated group of section 936 corporations under section 1504(b)(4) shall be operative for purposes of the application of this section solely in determining the amount of foreign source alternative minimum taxable income within each separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a). Thus, a section 936 corporation that meets the ownership requirements of section 1504(a) is not a member of the affiliated group for purposes of determining the amount of foreign source alternative minimum taxable income within each separate category and the alternative minimum tax foreign tax credit pursuant to section 59(a).

(iii) *Effective date.* This paragraph (d)(2) applies to taxable years beginning after December 31, 1989.

(d)(3) through (j) [Reserved]. For further guidance see § 1.861-14T(d)(3) through (j).

Par. 7. In § 1.861-14T, paragraph (d) is revised to read as follows:

§ 1.861-14T Special rules for allocating and apportioning certain expenses (other than interest expense) of an affiliated group of corporations (temporary).

(d)(1) and (2) [Reserved]. For further guidance, see § 1.861-14(d)(1) and (2).

Par. 8. Section 1.902-1(d)(3)(ii) is amended by adding text to read as follows:

§ 1.902-1 Credit for domestic corporate shareholder of a foreign corporation for foreign income taxes paid by the foreign corporation.

(d) * * *
(3) * * *
(ii) * * * For rules regarding dividend distributions before August 6, 1997, to certain more-than-90-percent United States shareholders of a controlled foreign corporation, see § 1.904-4(g)(3)(ii).

Par. 9. Section 1.904-0 is amended as follows:

1. Amending the entries for § 1.904-4 by:

a. Adding entries for paragraphs (c)(5)(v), (c)(6)(iv)(A), and (c)(6)(iv)(B).

b. Adding an entry for paragraph (g)(2)(v).

c. Revising the entries for paragraphs (g)(3) and (g)(3)(i).

d. Adding entries for paragraphs (g)(3)(i)(A), (g)(3)(i)(B), (g)(3)(i)(C), and (g)(3)(i)(D).

e. Revising the entry for paragraph (g)(3)(ii).

f. Adding entries for paragraphs (g)(3)(ii)(A), (g)(3)(ii)(B), (g)(3)(ii)(C), (g)(3)(ii)(D), and (g)(3)(ii)(E).

g. Revising the entries for paragraphs (g)(3)(iii) and (g)(3)(iv).

h. Adding an entry for paragraph (g)(3)(v).

i. Removing the entry for paragraph (g)(4).

The revisions and additions read as follows:

§ 1.904-0 Outline of regulation provisions for section 904.

* * * * *

§ 1.904-4 Separate application of section 904 with respect to certain categories of income.

* * * * *

(c) * * *

(5) * * *

(v) Coordination with section 954(b)(4).

(6) * * *

(iv) * * *

(A) General rule.

(B) Exception for U.S. shareholders not entitled to look-through.

* * * * *

- (g) * * *
- (2) * * *
- (v) Examples.
- (3) Special rule for dividends paid by a controlled foreign corporation.
- (i) Distributions out of earnings and profits accumulated when the distributing corporation was not a controlled foreign corporation.
- (A) General rule.
- (B) Ordering rule.
- (C) Effect of intervening noncontrolled status.
- (D) Examples.
- (ii) Pre-August 6, 1997, dividend distributions out of earnings and profits accumulated before a more-than-90-percent United States shareholder became a United States shareholder.
- (A) General rule.
- (B) Exception for intra-group acquisitions.
- (C) Ordering rule.
- (D) Distributions after August 5, 1997.
- (E) Examples.
- (iii) Treatment of earnings and profits for transition year.
- (iv) Definitions.
- (v) Effective date.
- * * * * *

Par. 10. Section 1.904-4 is amended by:

1. Revising the second sentence in paragraph (b)(1)(i)(B).
 2. Revising paragraph (c)(4)(ii).
 3. Adding a new paragraph (c)(5)(v).
 4. Adding the text to paragraph (c)(6)(iv).
 5. Adding a new sentence at the end of paragraph (c)(7)(ii).
 6. Revising the second sentence of paragraph (c)(7)(iii).
 7. Amending paragraph (c)(8) by revising the fifth sentence of paragraph (i) of *Example 9*, and the fifth sentence of paragraph (ii) of *Example 9*.
 8. Revising paragraph (e)(3)(ii).
 9. Adding the text to paragraph (e)(3)(iv) *Example 2*.
 10. Redesignating paragraph (g)(4) as paragraph (g)(2)(v).
 11. Revising the heading for paragraph (g)(3) and revising paragraph (g)(3)(i).
 12. Revising the paragraph headings and adding the text to paragraphs (g)(3)(ii) through (iv).
 13. Adding paragraph (g)(3)(v).
- The revisions and additions read as follows:

§ 1.904-4 Separate application of section 904 with respect to certain categories of income.

- * * * * *
- (b) * * * (1) * * * (i) * * *
- (B) * * * Passive income does not include any income that is also described in section 904(d)(1)(B) through (H), any export financing interest (as defined in section 904(d)(2)(G) and paragraph (h) of this

section), any high taxed income (as defined in section 904(d)(2)(F) and paragraph (c) of this section, or, for taxable years beginning before January 1, 1993, any foreign oil and gas extraction income (as defined in section 907(c)). * * *

* * * * *

- (c) * * *
- (4) * * *

(ii) *Income from sources without the QBU's country of operation.* Passive income from sources without the QBU's country of operation shall be grouped on the basis of the tax imposed on that income as provided in paragraphs (c)(3)(i) through (iv) of this section.

* * * * *

- (5) * * *

(v) *Coordination with section 954(b)(4).* For rules relating to passive income of a controlled foreign corporation that is exempt from subpart F treatment because the income is subject to high foreign tax, see section 904(d)(3)(E), § 1.904-4(c)(7)(iii), and § 1.904-5(d)(2).

- (6) * * *

(iv) *Increase in taxes paid by successors—(A) General rule.* Except as provided in paragraph (c)(6)(iv)(B) of this section, if passive earnings and profits previously included in income of a United States shareholder are distributed to a person that was not a United States shareholder of the distributing corporation in the year the earnings were included, any increase in foreign taxes paid or accrued, or deemed paid or accrued, on that distribution shall be treated as taxes related to general limitation income, regardless of whether the previously-taxed income was considered high-taxed income under section 904(d)(2)(F) in the year of inclusion.

(B) *Exception for U.S. shareholders not entitled to look-through.* In the case of a United States shareholder that, by reason of paragraph (g)(3)(ii) of this section (relating to distributions prior to August 6, 1997, to new shareholders acquiring more than 90 percent of a controlled foreign corporation), is not entitled to look-through treatment with respect to pre-acquisition earnings and profits of the distributing corporation, the increase in foreign taxes described in paragraph (c)(6)(iv)(A) of this section shall be treated as taxes related to the noncontrolled section 902 corporation income of the distributing corporation.

(C) *Effective date.* This paragraph (c)(6)(iv) applies to taxable years beginning after December 31, 1986. However, for taxable years beginning before January 1, 2001, taxpayers may rely on § 1.904-4(c)(6)(iv) of regulations

project INTL-1-92, published at 1992-1 C.B. 1209. See § 601.601(d)(2) of this chapter.

- (7) * * *

(ii) * * * For purposes of this paragraph (c)(7)(ii), foreign law is not considered to attribute a reduction in tax to a particular year or years if foreign law attributes the tax reduction to a pool or group containing income from more than one taxable year and such pool or group is defined based on a characteristic of the income (for example, the rate of tax paid with respect to the income) rather than on the taxable year in which the income is derived.

(iii) * * * If a taxpayer excludes passive income from a controlled foreign corporation's foreign personal holding company income under these circumstances, then, notwithstanding the general rule of § 1.904-5(d)(2), the income shall be considered to be passive income until distribution of that income. * * *

- (8) * * *

Example 9. (i) * * * Under country G's law, distributions are treated as made out of a pool of undistributed earnings subject to the 50% tax rate. * * *

(ii) * * * Country G treats the distribution of earnings as out of the 50% tax rate pool of earnings accumulated in 1987 and 1988.

* * *

* * * * *

- (e) * * *

- (3) * * *

(ii) *Special rule for affiliated groups.*

In the case of any corporation that is not a financial services entity under paragraph (e)(3)(i) of this section, but is a member of an affiliated group, such corporation will be deemed to be a financial services entity if the affiliated group as a whole meets the requirements of paragraph (e)(3)(i) of this section. For purposes of this paragraph (e)(3)(ii), affiliated group means an affiliated group as defined in section 1504(a), determined without regard to section 1504(b)(3). In counting the income of the group for purposes of determining whether the group meets the requirements of paragraph (e)(3)(i) of this section, the following rules apply. Only the income of group members that are United States corporations or foreign corporations that are controlled foreign corporations in which United States members of the affiliated group own, directly or indirectly, at least 80 percent of the total voting power and value of the stock shall be included. For purposes of this paragraph (e)(3)(ii), indirect ownership shall be determined under section 318 and the regulations under that section. The income of the group will not include any income from

transactions with other members of the group. Passive income will not be considered to be active financing income merely because that income is earned by a member of the group that is a financial services entity without regard to the rule of this paragraph (e)(3)(ii). This paragraph (e)(3)(ii) applies to taxable years beginning after December 31, 2000.

* * * * *

(iv) * * *

Example 2. Foreign corporation A, which is not a controlled foreign corporation, owns 100 percent of the stock of domestic corporation B, which owns 100 percent of the stock of domestic corporation C. A also owns 100 percent of the stock of foreign corporation D. D owns 100 percent of the stock of domestic corporation E, which owns 100 percent of the stock of controlled foreign corporation F. All of the corporations are members of an affiliated group within the meaning of section 1504(a) (determined without regard to section 1504(b)(3)). Pursuant to paragraph (e)(3)(ii) of this section, however, only the income of B, C, E, and F is counted in determining whether the group meets the requirements of paragraph (e)(3)(i) of this section. For the 2001 taxable year, B's income consists of \$95 of active financing income and \$5 of passive non-active financing income. C has \$40 of active financing income and \$20 of passive non-active financing income. E has \$70 of active financing income and \$15 of passive non-active financing income. F has \$10 of passive income. B and E qualify as financial services entities under the entity test of paragraph (e)(3)(i) of this section. Therefore, B and E are financial services entities without regard to whether the group as a whole is a financial services entity and all of the income of B and E shall be treated as financial services income. C and F do not qualify as financial services entities under the entity test of paragraph (e)(3)(i) of this section. However, under the affiliated group test of paragraph (e)(3)(ii) of this section, C and F are financial services entities because at least 80 percent of the group's total income consists of active financing income (\$205 of active financing income is 80.4 percent of \$255 total income). B's and E's passive income is not treated as active financing income for purposes of the affiliated group test of paragraph (e)(3)(ii) of this section even though it is treated as financial services income without regard to whether the group satisfies the affiliated group test. Once C and F are determined to be financial services entities under the affiliated group test, however, all of the passive income of the group is treated as financial services income. Thus, 100 percent of the income of B, C, E, and F for 2001 is financial services income.

* * * * *

(g) * * *

(3) *Special rule for dividends paid by a controlled foreign corporation—(i) Distributions out of earnings and profits accumulated when the distributing corporation was not a controlled foreign*

corporation—(A) General rule. Distributions from a controlled foreign corporation shall be treated as dividends from a noncontrolled section 902 corporation, and therefore not subject to the look-through rules of § 1.904–5, to the extent that the distribution is out of earnings and profits accumulated during periods when the distributing corporation was not a controlled foreign corporation.

(B) *Ordering rule.* The determination of the earnings to which a distribution from a controlled foreign corporation is attributable shall be made on a last-in first-out (LIFO) basis. Thus, a distribution shall be deemed made first from post-1986 undistributed earnings attributable to the period after the distributing corporation became a controlled foreign corporation (look-through pools), next from the non-look-through pool of post-1986 undistributed earnings, if any, and finally on a LIFO basis from pre-1987 accumulated profits.

(C) *Effect of intervening noncontrolled status.* [Reserved]

(D) *Examples.* The following examples illustrate the application of paragraph (g)(3)(i):

Example 1. S is a foreign corporation formed in 1980. Until 1992, S had no United States shareholders. In 1992, P, a domestic corporation, acquires 10 percent of the stock of S. Thus, for 1992 and subsequent years, S is a noncontrolled section 902 corporation. Because the 10-percent ownership requirement of section 902(a) was not satisfied until 1992, earnings accumulated by S before 1992 will be treated as pre-1987 accumulated profits for purposes of section 902, and the amount of foreign taxes deemed paid with respect to any distribution out of such pre-1987 accumulated profits will be computed on a year-by-year basis under the rules of section 902(c)(6)(A) and § 1.902–1(b)(3). In 2000, P acquires an additional 45% of the stock of S. Thus, for 2000 and subsequent years, S is a controlled foreign corporation. In 2000, S has no earnings and profits and pays a dividend out of prior years' earnings and profits. Pursuant to paragraph (g)(3)(i) of this section, because S was not a controlled foreign corporation before 2000, the dividend to P will be treated as a dividend from a noncontrolled section 902 corporation. The dividend is treated as paid first out of S's non-look-through pool of post-1986 undistributed earnings to the extent thereof, and then out of S's pre-1987 accumulated profits on a LIFO basis. The entire dividend will be subject to a single separate limitation for dividends from a noncontrolled section 902 corporation.

Examples 2 through 4. [Reserved]

(ii) *Pre-August 6, 1997, dividend distributions out of earnings and profits accumulated before a more-than-90-percent United States shareholder became a United States shareholder—*

(A) *General rule.* Look-through principles do not apply to distributions made before August 6, 1997, to a more-than-90-percent United States shareholder in the distributing corporation, to the extent the distributions are made from earnings and profits accumulated before the taxpayer became a United States shareholder of the distributing corporation (pre-acquisition earnings). Therefore, in the case of a distribution made before August 6, 1997, a dividend shall be treated as a dividend from a noncontrolled section 902 corporation, and the look-through rules of section 904(d)(3) and § 1.904–5 shall not apply, if—

(1) The distribution is received by a United States shareholder, or by an upper-tier controlled foreign corporation of a United States shareholder, at a time when such United States shareholder is a more-than-90-percent United States shareholder of the distributing corporation; and

(2) The more-than-90-percent United States shareholder was not a United States shareholder at the time the distributed earnings and profits were accumulated by the distributing corporation.

(B) *Exception for certain intra-group acquisitions.* Notwithstanding paragraph (g)(3)(ii)(A) of this section, a dividend recipient shall be entitled to look-through treatment on a distribution out of pre-acquisition earnings if—

(1) The dividend recipient is a United States shareholder of the distributing corporation;

(2) The immediately preceding owner or owners were entitled to look-through treatment on distributions from the distributing corporation (determined after the application of paragraphs (g)(3)(i) and (g)(3)(ii)(A) of this section); and

(3) Both at the time of such distribution and at the time that the dividend recipient acquired its interest from such immediately preceding owner or owners, such recipient and such preceding owner or owners are members of the same affiliated group (within the meaning of section 1504(a), determined without regard to section 1504(b)(3)).

(C) *Ordering rule.* If, under paragraph (g)(3)(ii) of this section (or under paragraphs (g)(3)(i)(A) and (g)(3)(ii) of this section), a shareholder is not entitled to look-through treatment, the determination whether a distribution from its controlled foreign corporation is attributable to pre-acquisition earnings shall be made on a last-in first-out (LIFO) basis. Thus, a distribution shall be deemed made first from the post-1986 undistributed earnings

attributable to the period after the shareholder became a United States shareholder in the distributing corporation, and then from pre-acquisition earnings, in the order described in paragraph (g)(3)(i)(B) of this section.

(D) *Distributions after August 5, 1997.* Look-through principles shall apply to distributions made after August 5, 1997, to a distribution from a controlled foreign corporation to a more-than-90-percent United States shareholder out of pre-acquisition earnings that were accumulated in years during which the corporation was a controlled foreign corporation. Post-1986 undistributed earnings attributable to the period after the shareholder became a United States shareholder in the distributing corporation and other post-1986 undistributed earnings accumulated while the distributing corporation was a controlled foreign corporation shall be combined into a single set of post-1986 undistributed earnings pools for each separate category described in § 1.904-5(a)(1) as of August 6, 1997.

(E) *Examples.* The following examples illustrate the application of this paragraph (g)(3)(ii):

Example 1. (i) P, a domestic corporation, owns 100 percent of the stock of U, a controlled foreign corporation. In 1992, P sells 100 percent of the stock of U to T, an unrelated domestic corporation. In 1992, U has no earnings and pays a dividend to T out of earnings and profits attributable to prior years. T is not related to P and P's ownership of U will not be attributed to T. Because the dividend to T in 1992 is out of post-1986 undistributed earnings that are pre-acquisition earnings, the dividend will be treated as a dividend from a noncontrolled section 902 corporation. In 1993, U pays a dividend to T out of current earnings and profits. T is entitled to look-through treatment on the dividend.

(ii) In September 1997, U pays a dividend to T out of both post-acquisition earnings and pre-acquisition earnings accumulated while U was a controlled foreign corporation. Under paragraph (g)(3)(ii)(D) of this section, T is entitled to look-through treatment on the full amount of the dividend.

Example 2. (i) Domestic corporation P has owned 95 percent of the stock of S, a controlled foreign corporation, from the time of S's organization in 1990. Domestic corporation R owns the remaining 5 percent of the stock of S. On December 1, 1996, T, an unrelated domestic corporation, acquires P's 95 percent interest in S. On December 31, 1996, S pays a dividend out of current and prior years' earnings and profits. T is a more-than-90-percent United States shareholder of S at the time it receives the dividend, but was not a United States shareholder at the time the distributed earnings were accumulated. Under this paragraph (g)(3)(ii), the portion of the dividend to T attributable to pre-acquisition earnings will be treated as a

dividend from a noncontrolled section 902 corporation. Under paragraph (g)(3)(iii) of this section, T will be entitled to look-through treatment on the portion of the dividend attributable to 1996 earnings and profits. Under paragraph (g)(3)(ii)(C) of this section, the dividend received by T will be treated as coming first from S's post-1986 undistributed earnings attributable to 1996, and then from pre-acquisition earnings.

(ii) On December 31, 1997, S pays a second dividend out of current and prior years' earnings and profits. Under paragraph (g)(3)(ii)(D) of this section, T will be entitled to look-through treatment on the full amount of the dividend because all of S's earnings and profits were accumulated in years during which S was a controlled foreign corporation. The dividends to R will be treated as passive income because R owns less than 10 percent of the stock of S and, therefore, is not entitled to look-through treatment.

Example 3. The facts are the same as in *Example 2* except that R, rather than T, acquires from P an 86 percent interest in S in 1996. Although R was a shareholder of S before the acquisition, it was not a United States shareholder because it did not own 10 percent of the voting stock of S. Thus, because R owns more than 90 percent of the stock of S, and received a distribution of earnings before August 7, 1997, that were accumulated before it became a United States shareholder of S, this paragraph (g)(3)(ii) applies and R is not entitled to look-through treatment on the 1996 dividend. R is entitled to look-through treatment on the 1997 dividend.

Example 4. Since its organization in 1980, S, a controlled foreign corporation, has been owned 60 percent by domestic corporation P and 40 percent by domestic corporation R. On November 15, 1996, domestic corporation T acquires R's 40 percent interest in the stock of S. S has no income in 1996 and pays a dividend on December 15, 1996, out of prior years' earnings and profits. This paragraph (g)(3)(ii) does not apply because T acquired less than 90 percent of the stock of S. Thus, T is entitled to look-through treatment on dividends distributed out of pre-acquisition earnings, because such earnings are attributable to periods in which S was a controlled foreign corporation.

(iii) *Treatment of earnings and profits accumulated in a transition year.*

Earnings and profits accumulated in the taxable year in which a corporation became a controlled foreign corporation or in which a more-than-90-percent United States shareholder became a United States shareholder shall be considered earnings and profits accumulated after the corporation became a controlled foreign corporation or the shareholder became a United States shareholder, respectively.

(iv) *Definitions.* The following definitions apply for purposes of this paragraph (g)(3):

(A) *More-than-90-percent United States shareholder.* The term *more-than-90-percent United States shareholder* means, with respect to any controlled

foreign corporation, a United States shareholder that owns more than 90 percent of the total combined voting power of all classes of stock entitled to vote of the controlled foreign corporation. In determining ownership for purposes of this definition, the indirect stock ownership rules of sections 958 and 318 and the regulations under those sections shall apply.

(B) *Non-look-through pool.* Except as otherwise provided, the term *non-look-through pool* means post-1986 undistributed earnings accumulated during periods in which the distributing corporation was a noncontrolled section 902 corporation that was not a controlled foreign corporation.

(C) *Post-1986 undistributed earnings.* The term *post-1986 undistributed earnings* has the meaning set forth in § 1.902-1(a)(9).

(D) *Pre-1987 accumulated profits.* The term *pre-1987 accumulated profits* has the meaning set forth in § 1.902-1(a)(10).

(E) *Upper tier controlled foreign corporation.* The term *upper tier controlled foreign corporation* of a United States shareholder means a controlled foreign corporation in which the taxpayer is a United States shareholder and which is an upper-tier corporation as defined in § 1.902-1(a)(6) with respect to the distributing corporation.

(v) *Effective date.* The provisions of this paragraph (g)(3) apply to taxable years beginning after December 31, 1986. However, for taxable years beginning before January 1, 2001, taxpayers may rely on § 1.904-4(g)(3)(ii), (iii) and (iv) of regulations project INTL-1-92, published at 1992-1 C.B. 1209. See § 601.601(d)(2) of this chapter.

* * * * *

Par. 11. Section 1.904-5 is amended as follows:

1. The last sentence in paragraph (a)(3) is revised and one new sentence is added.

2. Paragraph (d)(2) is amended by removing the word "For" at the beginning of the first sentence and adding the language "Except as provided in § 1.904-4(c)(7)(iii) (relating to reductions in tax upon distribution), for" in its place.

3. Paragraph (g) is revised.

4. Paragraph (h)(4) is amended by adding three new sentences at the end.

5. Paragraph (i)(1) is amended by:

a. Revising the third sentence.

b. Adding a new sentence at the end.

6. The text to paragraph (i)(3) is added.

7. Paragraph (i)(4) *Example 1* is revised.

8. The text to paragraph (i)(4) *Example 2* is added.

9. Paragraph (i)(4) *Example 3* is added.

10. The second and third sentences of paragraph (m)(1) are revised.

11. Paragraph (m)(4)(i) is revised.

12. Paragraph (m)(5) is amended by removing the language "951(a)" from the first sentence and adding the language "951(a)(1)(A)" in its place.

The revisions and additions read as follows:

§ 1.904-5 Look-through rules as applied to controlled foreign corporations and other entities.

(a) * * *

(3) * * * For this purpose the controlled group is any member of the affiliated group within the meaning of section 1504(a)(1) except that "more than 50 percent" shall be substituted for "at least 80 percent" wherever it appears in section 1504(a)(2). For taxable years beginning before January 1, 2001, the preceding sentence shall be applied by substituting "50 percent" for "more than 50 percent".

* * * * *

(g) *Application of look-through rules to certain domestic corporations.* The principles of section 904(d)(3) and this section shall apply to any foreign source interest, rents and royalties paid by a United States corporation to a related corporation. For this purpose, a United States corporation and another corporation are considered to be related if one owns, directly or indirectly, stock possessing more than 50 percent of the total voting power of all classes of stock of the other corporation or more than 50 percent of the total value of the other corporation. In addition, a United States corporation and another corporation shall be considered to be related if the same United States shareholders own, directly or indirectly, stock possessing more than 50 percent of the total voting power of all classes of stock or more than 50 percent of the total value of each corporation. For purposes of this paragraph, the constructive stock ownership rules of section 318 and the regulations under that section apply. For taxable years beginning before January 1, 2001, this paragraph (g) shall be applied by substituting "50 percent or more" for "more than 50 percent" each place it appears.

(h) * * *

(4) * * * Similarly, a partnership (first partnership) is considered as owning more than 50 percent of the value of another partnership (second partnership) if the first partnership

owns more than 50 percent of the capital and profits interests of the second partnership. For this purpose, value will be determined at the end of the partnership's taxable year. For taxable years beginning before January 1, 2001, the second preceding sentence shall be applied by substituting "50 percent" for "more than 50 percent".

(i) * * * (1) * * * In addition, two look-through entities are related if the same United States shareholders own, directly or indirectly, stock possessing more than 50 percent of the total voting power of all voting classes of stock (in the case of a corporation) or more than 50 percent of the total value of each look-through entity. * * * For taxable years beginning before January 1, 2001, the third sentence of this paragraph (i)(1) shall be applied by substituting "50 percent or more" for "more than 50 percent" each place it appears.

* * * * *

(3) *Special rule for dividends.* Solely for purposes of dividend payments between controlled foreign corporations in taxable years beginning after December 31, 2000, two controlled foreign corporations shall be considered related look-through entities if the same United States shareholder owns, directly or indirectly, at least 10 percent of the total voting power of all classes of stock of each foreign corporation. Taxpayers may choose to apply this paragraph (i)(3) in taxable years beginning after December 31, 1991, provided that appropriate adjustments are made to eliminate any double benefit arising from the application of this paragraph (i)(3) to taxable years that are not open for assessment.

(4) *Examples.* * * *

Example 1. P, a domestic corporation, owns all of the stock of S, a controlled foreign corporation. S owns 40 percent of the stock of T, a Country X corporation that is a controlled foreign corporation. The remaining 60 percent of the stock of T is owned by V, a domestic corporation. The percentages of value and voting power of T owned by S and V correspond to their percentages of stock ownership. T owns 40 percent (by vote and value) of the stock of U, a Country Z corporation that is a controlled foreign corporation. The remaining 60 percent of U is owned by unrelated U.S. persons. U earns exclusively general limitation non-subpart F income. In 2001, U makes an interest payment of \$100 to T. Look-through principles do not apply because T and U are not related look-through entities under paragraph (i)(1) of this section (because T does not own more than 50 percent of the voting power or value of U). The interest is passive income to T, and is subpart F income to P and V. Under paragraph (c)(1) of this section, look-through principles determine P and V's characterization of the subpart F inclusion

from T. P and V therefore must characterize the inclusion as passive income.

Example 2. The facts are the same as in *Example 1* except that instead of a \$100 interest payment, U pays a \$50 dividend to T in 2001. P and V each own, directly or indirectly, more than 10 percent of the voting power of all classes of stock of both T and U. Pursuant to paragraph (i)(3) of this section, for purposes of applying this section to the dividend from U to T, U and T are treated as related look-through entities. Therefore, look-through principles apply to characterize the dividend income as general limitation income to T. The dividend is subpart F income of T that is taxable to P and V. The subpart F inclusions of P and V are also subject to look-through principles, under paragraph (c)(1) of this section, and are characterized as general limitation income to P and V because the income is general limitation income of T.

Example 3. The facts are the same as in *Example 1*, except that U pays both a \$100 interest payment and a \$50 dividend to T, and T owns 80 percent (by vote and value) of U. Under paragraph (i)(1) of this section, T and U are related look-through entities, because T owns more than 50 percent (by vote and value) of U. Therefore, look-through principles apply to both the interest and dividend income paid or accrued by U to T, and T treats both types of income as general limitation income. Under paragraph (c)(1) of this section, P and V apply look-through principles to the resulting subpart F inclusions, which therefore are also general limitation income to P and V.

* * * * *

(m) * * * (1) * * * For purposes of determining the portion of a dividend paid or accrued (or amount treated as a dividend, including amounts described in section 951(a)(1)(B)) by a controlled foreign corporation that is treated as from sources within the United States under section 904(g)(4), the rules in paragraph (m)(4) of this section apply. For purposes of determining the portion of an amount included in gross income under section 951(a)(1)(A) that is attributable to income of the controlled foreign corporation from sources within the United States under section 904(g)(2), the rules in paragraph (m)(5) of this section apply. * * *

* * * * *

(4) * * * (i) * * * Any dividend or distribution treated as a dividend under this section (including an amount included in gross income under section 951(a)(1)(B)) that is received or accrued by a United States shareholder from a controlled foreign corporation shall be treated as income in a separate category derived from sources within the United States in proportion to the ratio of the portion of the earnings and profits of the controlled foreign corporation in the corresponding separate category from United States sources to the total amount of earnings and profits of the

controlled foreign corporation in that separate category.

* * * * *

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

Approved: December 13, 2000.

Jonathan Talisman,

Acting Assistant Secretary (Tax Policy).

[FR Doc. 00-32477 Filed 12-29-00; 8:45 am]

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DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[TD 8914]

RIN 1545-AX67

Definition of Hyperinflationary Currency for Purposes of Section 988

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final regulations.

SUMMARY: This document contains final regulations concerning when a currency will be considered hyperinflationary for purposes of section 988. These final regulations are intended to prevent distortions associated with the computation of income and expense arising from section 988 transactions denominated in hyperinflationary currencies.

DATES: The effective date of this regulation is February 14, 2000.

FOR FURTHER INFORMATION CONTACT: John W. Rogers III of the Office of Associate Chief Counsel (International) at (202) 622-3870.

SUPPLEMENTARY INFORMATION:

Background

This document contains final Income Tax Regulations (26 CFR part 1) under section 988 of the Internal Revenue Code (Code). On March 17, 1992, the IRS and Treasury published final regulations (57 FR 9172) relating to the taxation of section 988 transactions, including, inter alia, transactions denominated in hyperinflationary currencies. Also on March 17, 1992, proposed regulations were published (57 FR 9217) relating to the treatment of certain financial instruments denominated in hyperinflationary currencies. The proposed regulations did not separately define hyperinflationary currency. Rather, they simply made reference to the definition in the final regulations, § 1.988-1(f).

TD 8860 (65 FR 2026) (January 13, 2000) finalized the proposed regulations

relating to the treatment of financial instruments denominated in hyperinflationary currencies. Also in that issue of the **Federal Register** was a notice of proposed rulemaking regarding a proposed change in the period of years that are considered in determining whether a currency is hyperinflationary for purposes of section 988 (base period). The notice of proposed rulemaking also provided notice of a public hearing on the proposed regulations. No requests to speak were received, and the public hearing was canceled. This Treasury decision finalizes the proposed regulations relating to the change in base period, with certain minor changes.

Explanation of Provisions

As set out in the notice of proposed rulemaking, the term hyperinflationary currency, as defined in § 1.988-1(f), utilizes the definition in § 1.985-1(b)(2)(ii)(D). This definition was developed in the context of the Dollar Approximate Separate Transactions Method (DASTM) regulations, § 1.985-3, and generally considers the cumulative effects of inflation over the base period in determining whether a currency is hyperinflationary. In § 1.985-1(b)(2)(ii)(D), the base period consists of the thirty-six calendar month period immediately preceding the first day of the current calendar year. Use of this base period is generally appropriate in the context of DASTM because a qualified business unit needs to know in advance if it is subject to § 1.985-3 calculations.

However, failure to take the current year's inflation into account for purposes of computing foreign currency gain or loss under section 988 may lead to distortions in income and expense because inflation may rise dramatically in single year. Accordingly, the IRS and Treasury believe that for purposes of section 988, it is more appropriate to consider the cumulative inflation rate over the thirty-six month period ending on the last day of the taxpayer's (or the qualified business unit's) current taxable year. This change in the base period, however, applies only for the purposes of section 988 and not for the purpose of determining whether a taxpayer (or QBU) is subject to the provisions of § 1.985-3.

Summary of Comments

One comment was received in connection with the proposed change in the measurement of the base period under section 988. This comment relates to the application of the rule to regulated investment companies (RICs). The commenter stated that sections

852(a) and 4982 effectively require a RIC to distribute essentially all of its income during the calendar year in which it is earned. Thus, the commenter concluded that RICs need to know before the end of their tax year whether a particular currency is hyperinflationary. The Treasury and IRS recognize that the revised definition of base period could present an administrative burden for RICs. Accordingly, the final regulation provides that RICs are not subject to the revised base period standard of these final regulations.

A similar exclusion from the revised base period standard has been made for REITs due to their similar distribution requirements. The regulation has also been amended to provide that the Service may by notice provide that the revised base period standard shall not apply to any section 988 transaction of an entity with distribution requirements similar to that of RICs and REITs.

In addition, the regulation was amended to provide that generally accepted accounting principles may not apply to alter the base period outlined in paragraph (f)(1)(ii)(A) of this section. This change is intended to clarify that the last sentence of § 1.985-1(b)(2)(ii)(D) may not be used to alter the base period for purposes of section 988.

Special Analyses

It has been determined that this Treasury decision is not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It has also been determined that section 553(b) of the Administrative Procedures Act (5 U.S.C. chapter 5) and the Regulatory Flexibility Act (5 U.S.C. chapter 6) do not apply to these regulations, and therefore, a Regulatory Flexibility Analysis is not required.

Drafting Information

The principal author of these regulations is John W. Rogers III of the Office of the Associate Chief Counsel (International). However, other personnel from the IRS and Treasury Department also participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Adoption of Amendments to the Regulations

Accordingly, 26 CFR part 1 is amended as follows:

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

Par. 2. In § 1.988–1, paragraph (f) is revised to read as follows:

§ 1.988–1 Certain definitions and special rules.

* * * * *

(f) *Hyperinflationary currency*—(1) *Definition*—(i) *General rule.* For purposes of section 988, a hyperinflationary currency means a currency described in § 1.985–1(b)(2)(ii)(D). Unless otherwise provided, the currency in any example used in §§ 1.988–1 through 1.988–5 is not a hyperinflationary currency.

(ii) *Special rules for determining base period.* In determining whether a currency is hyperinflationary under § 1.985–1(b)(2)(ii)(D) for purposes of this paragraph (f), the following rules will apply:

(A) The base period means the thirty-six calendar month period ending on the last day of the taxpayer's (or qualified business unit's) current taxable year. Thus, for example, if for 1996, 1997, and 1998, a country's annual inflation rates are 6 percent, 11 percent, and 90 percent, respectively, the cumulative inflation rate for the three-year base period is 124% [$((1.06 \times 1.11 \times 1.90) - 1.0 = 1.24) \times 100 = 124\%$]. Accordingly, assuming the QBU has a calendar year as its taxable year, the currency of the country is hyperinflationary for the 1998 taxable year. This change in the § 1.985–1(b)(2)(ii)(D) base period shall not apply to any section 988 transaction of an entity described in section 851 (regulated investment company (RIC)) or section 856 (real estate investment trust (REIT)). The Service may, by notice, provide that the foregoing change in the § 1.985–1(b)(2)(ii)(D) base period does not apply to any section 988 transaction of an entity with distribution requirements similar to a RIC or REIT.

(B) The last sentence of § 1.985–1(b)(2)(ii)(D) shall not apply to alter the base period for purposes of this paragraph (f) in determining whether a currency is hyperinflationary for purposes of section 988. Accordingly, generally accepted accounting principles may not apply to alter the base period for purposes of this paragraph (f).

(2) *Effective date.* Paragraph (f)(1) of this section shall apply to transactions entered into after February 14, 2000.

* * * * *

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

Approved: November 29, 2000.

Jonathan Talisman,

Acting Assistant Secretary of the Treasury.

[FR Doc. 00–32188 Filed 12–29–00; 8:45 am]

BILLING CODE 4810–31–P

DEPARTMENT OF THE TREASURY**Internal Revenue Service****26 CFR Parts 1 and 602**

[TD 8930]

RINs 1545–AV14 and 1545–A051

Credit for Increasing Research Activities

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final regulations.

SUMMARY: This document contains final regulations relating to the computation of the credit under section 41(c) and the definition of *qualified research* under section 41(d). These regulations are intended to provide guidance concerning the requirements necessary to qualify for the credit for increasing research activities, guidance in computing the credit for increasing research activities, and rules for electing and revoking the election of the alternative incremental credit. These regulations reflect changes to section 41 made by the Tax Reform Act of 1986 (the 1986 Act), the Revenue Reconciliation Act of 1989, the Small Business Job Protection Act of 1996, the Taxpayer Relief Act of 1997, the Tax and Trade Relief Extension Act of 1998 (the 1998 Act), and the Tax Relief Extension Act of 1999 (the 1999 Act). These regulations also provide certain technical amendments to the existing regulations.

DATES: *Effective Dates:* These regulations are effective January 3, 2001.

Applicability Dates: For dates of applicability of these regulations, see Effective Dates under **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT: Lisa J. Shuman or Leslie H. Finlow at (202) 622–3120 (not a toll-free number).

SUPPLEMENTARY INFORMATION:**Paperwork Reduction Act**

The collections of information contained in § 1.41–8(b) of this final

rule have been reviewed and approved by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507) under the number 1545–1625. Responses to these collections of information are mandatory.

The reporting burden contained in § 1.41–8(b)(2) (relating to the election of the alternative incremental credit) is reflected in the burden of Form 6765.

Estimated average annual burden hours per respondent under § 1.41–8(b)(3) (relating to the revocation of the election to use the alternative incremental credit) is 250 hours.

Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be sent to the Internal Revenue Service, Attn: IRS Reports Clearance Officer, W:CAR:MP:FP:S:O, Washington, DC 20224, and to the Office of Management and Budget, Attn: Desk Officer for the Department of the Treasury, Office of Information and Regulatory Affairs, Washington, DC 20503.

The collections of information contained in § 1.41–4(d) of this final rule have been reviewed and, pending receipt and evaluation of public comments, approved by the Office of Management and Budget (OMB) under 44 U.S.C. 3507 and assigned control number 1545–1625. This information is required to assist in the examination of the research credit and to ensure that the research credit is properly targeted to serve as an incentive to engage in qualified research. This information will be used to verify that the amounts treated as qualified research expenses were paid or incurred for activities intended to discover information that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering. This collection of information is required to obtain a benefit. The likely recordkeepers are businesses or other for-profit institutions.

Estimated total annual recordkeeping burden for § 1.41–4(d) is 18,000 hours. The annual estimated burden per respondent varies from .5 hours to 2.5 hours, depending on the circumstances, with an estimated average of 1.5 hours.

The estimated number of recordkeepers is 12,000.

Comments on the collection of information should be sent to the Office of Management and Budget, Attn: Desk Officer for the Department of the Treasury, Office of Information and Regulatory Affairs, Washington, DC 20503, with copies to the Internal Revenue Service, Attn: IRS Reports Clearance Officer, W:CAR:MP:FP:S:O,

Washington, DC 20224. Comments on the collection of information should be received by March 5, 2001. Comments are specifically requested concerning:

Whether the collection of information is necessary for the proper performance of the functions of the Internal Revenue Service, including whether the information will have practical utility;

The accuracy of the estimated burden associated with the collection of information (see below);

How the quality, utility, and clarity of the information to be collected may be enhanced;

How the burden of complying with the collection of information may be minimized, including through the application of automated collection techniques or other forms of information technology; and

Estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid control number assigned by the Office of Management and Budget.

Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and tax return information are confidential, as required by 26 U.S.C. 6103.

Background

On January 2, 1997, the IRS and Treasury published in the **Federal Register** (62 FR 81) a notice of proposed rulemaking (REG-209494-90, 1997-1 C.B. 723) under section 41 describing when computer software that is developed by (or for the benefit of) a taxpayer primarily for the taxpayer's internal use can qualify for the credit for increasing research activities (the 1997 proposed regulations). Comments responding to the 1997 proposed regulations were received and a public hearing was held on May 13, 1997.

On December 2, 1998, the IRS and Treasury published in the **Federal Register** (63 FR 66503) a notice of proposed rulemaking (REG-105170-97, 1998-50 I.R.B. 10) under section 41 relating to the credit for increasing research activities (the 1998 proposed regulations). The 1998 proposed regulations propose rules and examples relating to (1) the definition of gross receipts for purposes of computing the base amount under section 41(c), (2) the application of the consistency rule in computing the base amount, (3) the

definition of qualified research under section 41(d), (4) the application of the exclusions from the definition of qualified research, (5) the application of the shrinking-back rule, and (6) the election of the alternative incremental credit. The 1998 proposed regulations also propose certain technical amendments to the existing regulations. Comments responding to the 1998 proposed regulations were received and a public hearing was held on April 29, 1999.

In the 1999 Act, Congress extended the credit for a five-year period. The Conference Report accompanying the 1999 Act included the following language addressing the proposed regulations:

In extending the research credit, the conferees are concerned that the definition of qualified research be administered in a manner that is consistent with the intent Congress has expressed in enacting and extending the research credit. The conferees urge the Secretary to consider carefully the comments he has and may receive regarding the proposed regulations relating to the computation of the credit under section 41(c) and the definition of qualified research under section 41(d), particularly regarding the "common knowledge" standard. The conferees further note the rapid pace of technological advance, especially in service-related industries, and urge the Secretary to consider carefully the comments he has and may receive in promulgating regulations in connection with what constitutes "internal use" with regard to software expenditures. The conferees also wish to observe that software research, that otherwise satisfies the requirements of section 41, which is undertaken to support the provision of a service, should not be deemed "internal use" solely because the business component involves the provision of a service.

The conferees wish to reaffirm that qualified research is research undertaken for the purpose of discovering new information which is technological in nature. For purposes of applying this definition, new information is information that is new to the taxpayer, is not freely available to the general public, and otherwise satisfies the requirements of section 41. Employing existing technologies in a particular field or relying on existing principles of engineering or science is qualified research, if such activities are otherwise undertaken for purposes of discovering information and satisfy the other requirements of section 41.

The conferees also are concerned about unnecessary and costly taxpayer record keeping burdens and reaffirm that eligibility for the credit is not intended to be contingent on meeting unreasonable record keeping requirements.

H.R. Conf. Rep. No. 106-478, at 132 (1999).

After considering the comments received, the statements made at the public hearings, and the legislative history for the research credit, the

proposed regulations are adopted as revised by this Treasury decision.

Explanation of Provisions

This document amends 26 CFR part 1 to provide additional rules under section 41. Section 41 contains the rules for the credit for increasing research activities.

I. Basic Principles

A number of commentators objected to the inclusion of the basic principles statement in § 1.41-1(a) of the proposed regulations. They stated that the inclusion of a basic principles section was unusual, and that the basic principles section could be read to impose additional and unwarranted conditions for credit eligibility. In response to these comments, and because IRS and Treasury have concluded that the requisite principles are adequately reflected in the provisions of the regulations, the final regulations omit a separate statement of basic principles. The clarifications that the credit may be available where the technological advance sought is evolutionary, where the taxpayer is not the first to achieve the advance, and where the taxpayer fails to achieve the intended advance have been incorporated elsewhere in the regulations.

II. Gross Receipts

When Congress revised the computation of the research credit to incorporate a taxpayer's gross receipts, neither the statute nor the legislative history defined the term *gross receipts*, other than to provide that gross receipts for any taxable year are reduced by returns and allowances made during the tax year, and, in the case of a foreign corporation, that only gross receipts effectively connected with the conduct of a trade or business within the United States are taken into account. See section 41(c)(6).

The proposed regulations generally defined gross receipts as the total amount derived by a taxpayer from all activities and sources. However, in recognition of the fact that certain extraordinary gross receipts might not be taken into account when a business determines its research budget, the proposed regulations provided that certain extraordinary items (such as receipts from the sale or exchange of capital assets) would be excluded from the computation of gross receipts.

Several commentators objected to the definition of gross receipts in the proposed regulations. Referring to the inclusion in a House Budget Report of the term *sales growth* as an apparent

short-hand reference to an increase in gross receipts, some commentators argued that gross receipts should be limited to income from sales. See H.R. Rep. No. 101-247, at 1200 (1989). In determining its research budget, however, a business may take into account any expected income stream, regardless of whether or not the income is derived from sales or from other active business activities. Moreover, many businesses do not generate any income in the form of sales. Accordingly, the final regulations do not adopt this suggestion.

The final regulations also do not adopt suggestions that the definition of gross receipts be narrowed to exclude those items not directly related to the conduct of the taxpayer's trade or business. As noted above, any expected income stream may be taken into account in determining a business' research budget, regardless of the source of the income. Moreover, IRS and Treasury believe that a subjective narrowing of the term *gross receipts*, as suggested by these commentators, could leave the definition of the term, and thus the computation of the base amount, vulnerable to manipulation.

For example, a narrower definition allowing taxpayers to exclude items not derived in the ordinary course of business might prompt a taxpayer to assert that certain royalties received in the 1980s were derived in the ordinary course of business and are includable as gross receipts (thus decreasing the taxpayer's fixed-base percentage), but that certain interest income received in the years preceding the credit year was not derived in the ordinary course of business and was not includable in gross receipts (thus decreasing the base amount). Nor would a rule of consistency be effective in preventing such manipulation. While the taxpayer described above would be characterizing the nature of its income items as derived or not derived in the ordinary course of a trade or business so as to maximize the amount of the credit, the taxpayer would not be taking inconsistent positions with respect to the same items of income.

Several commentators objected to the definition of gross receipts in the proposed regulations as it applies to start-up firms with pre-operating interest income. If pre-operating interest income is treated as a gross receipt, many start-up firms would be precluded from using the start-up rules to compute their fixed-base percentages, because the application of the start-up rules is conditioned on a taxpayer not having both gross receipts and qualified research expenses in certain taxable

years during the 1980s. Moreover, because a start-up firm whose only gross receipt is pre-operating interest income likely would have significant qualified research expenses relative to gross receipts (and thus a high fixed-base percentage), such a firm likely would derive less benefit from the credit.

IRS and Treasury recognize that the start-up rules appear to contemplate that there will be years in which a taxpayer has qualified research expenses but no gross receipts. However, it would be difficult to conceive of such a year if gross receipts are defined to include pre-operating investment income. To address these concerns and pursuant to the regulatory authority of section 41(c)(3)(B)(iii), the final regulations exclude from the definition of gross receipts any income received by a taxpayer in a taxable year that precedes the first taxable year in which the taxpayer derives more than \$25,000 in gross receipts other than investment income. For this purpose, investment income is defined as interest or distributions with respect to stock (other than the stock of a 20-percent owned corporation as defined in section 243(c)(2) of the Code).

Some commentators suggested that the definition of gross receipts should be clarified to exclude certain payments made by pharmaceutical manufacturers to various insurers, managed care organizations and state governments. The final regulations do not adopt any provision specifically addressing such payments.

III. The Discovery Requirement

To qualify for the research credit, section 41(d) requires that a taxpayer undertake research for the purpose of discovering information which is technological in nature, and the application of which is intended to be useful in the development of a new or improved business component of the taxpayer. Section 1.41-4(a)(3) of the proposed regulations defines the phrase *discovering information* as obtaining knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering.

Commentators criticized this definition of discovering information, arguing that the definition imposes a discovery requirement that was not mandated by the statute. Commentators suggested that the phrase *discovering information*, as used in the statute, was not intended as an additional requirement, but was simply used as a phrase to link the term *research* with the types of information required as the subject of the research. Commentators

argued that a taxpayer who seeks to resolve its own subjective uncertainty as to the information at issue is undertaking sufficient discovery for purposes of section 41(d).

Consistent with the legislative history and case law as described below, however, IRS and Treasury continue to believe that section 41 conditions credit eligibility on an attempt to discover information that goes beyond the common knowledge of skilled professionals in the particular field of science or engineering.

The legislative history to the 1986 Act, which narrowed the definition of the term *qualified research*, explained that Congress had originally enacted the research credit to encourage business firms to perform the research necessary to increase the innovative qualities and efficiency of the U.S. economy. H.R. Rep. No. 99-426, at 177-78; S. Rep. No. 99-313, at 694-95. Congress was concerned that taxpayers had applied the original definition of qualified research "too broadly," that some taxpayers had claimed the credit for "virtually any expenses relating to product development" and that many of these taxpayers were "in industries that do not involve high technology or its application in developing technologically new and improved products or methods of production." *Id.* In an illustration of the changes enacted, the legislative history explained that, under the new definition: "Research does not rely on the principles of computer science merely because a computer is employed. Research may be treated as undertaken to *discover information* that is technological in nature, however, if the research is *intended to expand or refine existing principles of computer science.*" H.R. Conf. Rep. No. 99-841, at II-71 n.3 (1986) (emphasis added).

Following the 1986 Act changes to the credit, a discovery requirement has been applied in several recent cases. See, e.g., *United Stationers, Inc. v. United States*, 163 F.3d 440 (7th Cir. 1998), *Norwest v. Commissioner*, 110 T.C. 454 (1998), and *WICOR, Inc. v. United States*, 116 F. Supp. 2d 1028 (E.D. Wis. 2000).

In reaffirming the scope of the term *qualified research*, the Conference Report to the 1998 Act noted that:

evolutionary research activities intended to improve functionality, performance, reliability, or quality are eligible for the credit, as are research activities intended to achieve a result that has already been achieved by other persons *but is not yet within the common knowledge* (e.g., freely available to the general public) of the field (provided that the research otherwise meets

the requirements of section 41, including not being excluded by subsection (d)(4)).

H.R. Conf. Rep. No. 105-825, at 1548 (1998) (emphasis added). In particular, it is noteworthy that the conferees clarified that the credit is available for research intended to achieve a result that has been achieved by others but is not yet within the common knowledge. The negative inference is that the credit is not available for research intended to achieve a result that has been achieved by others and is within the common knowledge of the field.

The discovery requirement as set forth in the final regulations also is consistent with the legislative history to the 1999 Act (the text of which is set forth above under Background). In that legislative history, for example, the conferees stated that:

[e]mploying existing technologies in a particular field or relying on existing principles of engineering or science is qualified research, if such activities are otherwise undertaken for purposes of discovering information and satisfy the other requirements under section 41.

H.R. Conf. Rep. No. 106-478, at 132 (emphasis added). By referring separately to a requirement that the research be undertaken for purposes of discovering information, this legislative history again confirmed that the phrase "discovering information" is a separate substantive requirement and not merely a phrase used to link the term *research* with the types of information required as the subject of the research.

In light of the case law and the legislative history, the final regulations retain the requirement that a taxpayer seek to discover information that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of science or engineering. However, consistent with the legislative history to the 1999 Act, IRS and Treasury have carefully considered comments relating to the "common knowledge" standard, and made a number of changes to address specific taxpayer concerns about the discovery requirement.

In response to comments regarding the application of the discovery requirement, the final regulations clarify that the phrase "common knowledge of skilled professionals in a particular field of science or engineering" means information that should be known to skilled professionals had they performed, before the research in question was undertaken, a reasonable investigation of the existing level of information in the particular field of science or engineering. Thus, in order to satisfy the discovery requirement,

research must be undertaken for the purpose of discovering information that is beyond the knowledge that should be known to skilled professionals had they performed a reasonable investigation of the existing level of knowledge in the particular field of science or engineering. There is no requirement, however, that a taxpayer actually conduct such an investigation in order to claim the credit. To further clarify the application of the discovery requirement, the final regulations also state, as an example, that trade secrets generally are not within the common knowledge of skilled professionals because they are not reasonably available to skilled professionals not employed, hired, or licensed by the owner of such trade secrets.

Also, in response to comments, the discovery requirement in the final regulations has been reworded to refer to the common knowledge of skilled professionals in a particular field of science or engineering (rather than a particular field of technology or science, as in the proposed regulations). As in the proposed regulations, the common knowledge of skilled professionals is intended to serve as an objective standard for the baseline knowledge that a credit-eligible taxpayer must seek to exceed, expand, or refine. The reference to the common knowledge of skilled professionals is not intended to impose qualification requirements on the personnel that the taxpayer uses to conduct qualified research.

Several commentators raised concerns that the discovery requirement in the proposed regulations required that taxpayers must "prove a negative;" in response to these concerns about the potential burden imposed on taxpayers to demonstrate that they satisfy the discovery requirement, IRS and Treasury have added to the final regulations a rebuttable presumption. The final regulations provide that, if a taxpayer demonstrates with credible evidence that research activities were undertaken to obtain the information described in documentation prepared before or during the early stages of the research and if that documentation also sets forth the basis for the taxpayer's belief that obtaining this information would exceed, expand, or refine the common knowledge of skilled professionals in the particular field of science or engineering, then the research activities are presumed to satisfy the discovery requirement. This rebuttable presumption would arise, however, only if the taxpayer cooperates with reasonable requests by the IRS for witnesses, information, documents, meetings, and interviews.

In a case where the rebuttable presumption arises, the final regulations provide that the Commissioner may overcome this presumption by demonstrating that the information described in the taxpayer's documentation was within the common knowledge of skilled professionals in the particular field of science or engineering. That is, the Commissioner would have to demonstrate that the information would have been known to such skilled professionals had they performed (before the research was undertaken) a reasonable investigation of the existing level of information in the particular field of science or engineering.

By way of further clarification, a provision has been added and several examples have been changed or eliminated to remove any implication that the underlying principles of science or engineering used in the research must themselves be novel. IRS and Treasury recognize that virtually all research utilizes existing scientific principles and technology. The requirement that a taxpayer seek to exceed, expand, or refine the common knowledge of skilled professionals does not mean that the tools and principles used in the attempt to achieve the technological advance must themselves be beyond the common knowledge.

Also, in response to commentators' suggestions, the final regulations provide that a taxpayer is conclusively presumed to have obtained knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering, if that taxpayer was awarded a patent for the business component. Section 101 of title 35 of the United States Code provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of [title 35]." Such an invention or discovery may be patentable if it was not previously known, used, patented, or described, as set forth in 35 U.S.C. 102, and the differences between the invention and the prior art are such that the invention would not have been obvious to a person having ordinary skill in the relevant art. See 35 U.S.C. 102.

The final regulations contain a patent safe harbor because IRS and Treasury believe that information leading to a patentable invention constitutes information that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant

field. Of course, qualification under the patent safe harbor does not necessarily establish that the discovery requirement is satisfied with respect to all of the research associated with the patentable invention (for example, some of the research might relate to style).

The final regulations emphasize that a patent is not a precondition for credit eligibility. Because not all research succeeds in achieving its objective and for other reasons, it is obvious that not all research intended to discover information that goes beyond the common knowledge results in a patent. Thus, the absence of a patent should have no bearing on credit eligibility. The factors underlying the denial of a patent application, on the other hand, may be relevant to the determination of whether the discovery requirement is satisfied.

Because section 41(d)(3)(B) provides that the credit is not available for research related to style, taste, cosmetic, or seasonal design factors, the patent safe harbor does not include patents for design, as defined by 35 U.S.C. 171.

In light of these changes, modifications have been made to several examples in the proposed regulations, including an example in the proposed regulations relating to research undertaken to develop a new tire. This example has been moved to the section of the final regulations that illustrates the exclusion for research conducted after the beginning of commercial production (discussed in *VII. Research After Commercial Production* of this Preamble).

To address concerns expressed by a number of commentators that the common knowledge standard may be difficult for taxpayers and examiners to apply, and may give rise in practice to inconsistent treatment of similarly situated taxpayers (especially where examiners have limited expertise in a particular scientific field) IRS and Treasury have initiated measures to promote fair and consistent application of the discovery requirement and the other conditions for credit eligibility. Consistent with the suggestion of one commentator, IRS has met with Revenue Canada to discuss Canada's joint industry/government initiative to improve administration of the Canadian research credit. IRS also has met with various industry associations to form joint initiatives to devise guidelines for the administration and examination of the credit in particular industries. Similar efforts with respect to other industry groups are anticipated.

IV. Process of Experimentation

Commentators objected to § 1.41-4(a)(5) of the proposed regulations, which defines a process of experimentation to include a prescribed four-step process. Commentators argued that while the four-step process may accurately have described the pure scientific method of conducting experiments, commercial and industrial practice does not always conform precisely to such requirements. Commentators also argued that the four-step process required by the proposed regulations was adapted from a description in the legislative history of the 1986 Act that was included for illustrative purposes and not as a comprehensive definition of the term *process of experimentation*.

In light of these comments, the final regulations provide that taxpayers conducting a process of experimentation may, but are not required to, engage in the four-step process.

Consistent with the legislative history, the final regulations provide further clarification on the manner in which a process of experimentation differs from research and development in the experimental or laboratory sense, as required by § 1.174-2(a). A process of experimentation is a process to evaluate more than one alternative designed to achieve a result where the capability or method of achieving that result is uncertain at the outset, but (in contrast to expenditures that qualify under section 174) does not include the evaluation of alternatives to establish the appropriate design of a business component when the capability and method for developing or improving the business component are not uncertain. See H.R. Conf. Rep. No. 99-841, at II-72 ("The term process of experimentation means a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the outset."); *United Stationers*, 163 F.3d at 446; *Norwest*, 110 T.C. at 496.

V. Recordkeeping Requirement

Part of the four-step process of experimentation test prescribed in § 1.41-4(a)(5) of the proposed regulations was a requirement that taxpayers record the results of their experiments. Maintaining that this requirement was particularly burdensome, commentators argued that, in the industrial or commercial setting, the recording of results is not necessarily inherent in a bona fide process of experimentation.

For these reasons, the final regulations do not contain a requirement that taxpayers record the results of their experiments. Moreover, reference to the recording of results has been eliminated from the illustrative (non-mandatory) description of a four-step process of experimentation.

To assist in the examination of claims for the credit and to ensure that the credit is properly targeted to serve as an incentive to engage in qualified research, the final regulations do include a less burdensome contemporaneous documentation requirement. Under the final regulations, taxpayers must prepare and retain written documentation before or during the early stages of the research project that describes the principal questions to be answered and the information the taxpayer seeks to obtain that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering. Taxpayers also must comply with the general recordkeeping requirements of section 6001.

As noted above, taxpayers may also avail themselves of a rebuttable presumption that they satisfy the discovery requirement if their contemporaneous documentation also sets forth the basis for the taxpayer's belief that obtaining this information would exceed, expand, or refine the common knowledge of skilled professionals in the particular field of science or engineering.

VI. The Shrinking-Back Rule

Under § 1.41-4(b) of the proposed regulations, and consistent with the legislative history to the 1986 Act, if the requirements of section 41(d) are not met for an entire product, then the credit may be available with respect to the next most significant subset of elements of that product. This shrinking back continues until either a subset of elements of the product that satisfies the requirements is reached, or the most basic element of the product is reached and such element fails to satisfy the test.

The final regulations clarify that this shrinking-back rule applies only if the taxpayer incurs some research expenses with respect to the overall business component that would constitute qualified research expenses with respect to that business component but for the fact that less than substantially all of the research activities with respect to that component constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability or quality. In cases where the substantially-all test is

satisfied with respect to the overall business component, those research expenses with respect to the overall business component that are qualified research expenses are credit eligible, and there is no need for a taxpayer to shrink back to apply the tests with respect to subsets of elements of the business component. Of course, the mere fact that taxpayers are not required to shrink back to a smaller business component does not mean that all of the research expenses with respect to the overall credit are credit eligible. Research expenses that are not qualified research expenses, for example because they relate to style, taste, cosmetic, or seasonal design factors, remain ineligible for the credit.

In response to commentators' suggestions, the final regulations also clarify that, if the original product is not eligible for the credit, the application of the shrinking-back rule may result in credit eligibility for multiple business components that are subsets of the original product. The regulations clarify that the shrinking-back rule may not itself be applied as a reason to exclude research activities from credit eligibility. Finally, an example has been added to illustrate these concepts.

VII. Research After Commercial Production

Several commentators addressed the section of the proposed regulations providing that activities conducted after the beginning of commercial production of a business component are not qualified research. Under the proposed regulations, activities are conducted after the beginning of commercial production of a business component if such activities are conducted after the component is developed to the point where it is ready for commercial sale or use, or meets the basic functional and economic requirements of the taxpayer for the component's sale or use. Moreover, certain specified activities (like preproduction planning for a finished business component and trial production runs) are deemed to occur after the beginning of commercial production.

Because the provisions set forth above closely reflect the legislative history of the post-production exclusion, these tests have been retained in the final regulations. See H.R. Conf. Rep. No. 841, at II-74-75. However, several changes have been made in response to commentators' concerns.

First, a change has been made to the list of activities that are *per se* deemed to occur after the beginning of commercial production. In the proposed regulations, one of the items on that list

was "debugging or correcting flaws in a business component." Consistent with the legislative history, IRS and Treasury continue to believe that debugging should be conclusively presumed to occur after the beginning of commercial production. However, many activities conducted before the beginning of commercial production could be construed as the correction of flaws. Thus, the *per se* list contained in the final regulations has been changed to refer to debugging activities but not to the correction of flaws.

Second, an example has been added to clarify that a new research project to improve a business component is not disqualified merely because the new research project commences after the commercial production of the unimproved business component. Other examples have been changed to eliminate references to and factual assertions about specific industries.

Third, the final regulations incorporate provisions from the legislative history to the 1986 Act that clinical testing of a pharmaceutical product prior to its commercial production in the United States is not treated as occurring after the beginning of commercial production even if the product is commercially available in other countries, and that additional clinical testing of a pharmaceutical product after a product has been approved for a specific therapeutic use by the Food and Drug Administration and is ready for commercial production and sale are not treated as occurring after the beginning of commercial production if such clinical tests are undertaken to establish new functional uses, characteristics, indications, combinations, dosages, or delivery forms for the product.

VIII. Adaptation

Several commentators suggested alternate formulations of the adaptation exclusion. Because such formulations effectively would render the adaptation exclusion inapplicable to activities that satisfy the other requirements for qualified research, thereby reading the exclusion out of the Internal Revenue Code, the final regulations do not adopt the suggestions.

Two new examples clarify that the adaptation exclusion may also apply to contract research expenses paid by the customer to the vendor or to in-house research expenses incurred by the customer itself to adapt an existing business component to that customer's requirement or need.

IX. Internal-Use Software

As noted above, the 1997 proposed regulations describe when software that is developed by (or for the benefit of) a taxpayer primarily for the taxpayer's internal use can qualify for the credit. The final regulations incorporate these special provisions for internal-use software. A number of changes have been made to the 1997 proposed regulations to address commentator concerns, and to coordinate the internal-use provisions with the other provisions of the final regulations.

Under the proposed regulations, research with respect to software developed primarily for a taxpayer's internal use is qualified research only if it satisfies both the general requirements for credit eligibility under section 41 *and* an additional condition for eligibility. Except for certain software developed for use in conducting qualified research or for use in a production process, and for certain software created as part of a package of hardware and software developed concurrently, the additional condition for eligibility is a requirement that the taxpayer satisfy a three-part test (requiring that the internal-use software be innovative, that its development involve significant economic risk, and that it not be commercially available).

Most of the comments received focused on two issues—(1) the determination of when software is developed primarily for internal use, and (2) the application of the three-part test to internal-use software. On the first issue, several commentators urged that internal-use software be defined to exclude any software used to deliver a service to customers or any software that includes an interface with customers or the public. After careful analysis of the legislative history to the 1986 Act and the 1999 Act, however, IRS and Treasury concluded that such a broad exclusion would be inconsistent with the statutory mandate, because the exclusion would extend to some software that Congress clearly intended to treat as internal-use software. At the same time, IRS and Treasury share the commentators' belief that the goals of the research credit may be advanced by removing additional conditions for credit-eligibility in the case of certain internal-use software used to provide new features to services offered to customers that are not otherwise available to them. Accordingly, as described in more detail below, the final regulations retain the definition of internal-use software contained in the proposed regulations, but provide a new exception (pursuant to the regulatory

authority under section 41(d)(4)(E)) under which the development of certain internal-use software used to deliver noncomputer services to customers with features that are not yet offered by a taxpayer's competitors is not subject to the three-part test.

Consistent with a statement in the Conference Report to the 1999 Act that software research undertaken to support the provision of a service should not be deemed internal-use software "solely because the business component involves the provision of a service," the final regulations clarify that the determination of whether software is internal-use software depends on the nature of the service provided by the taxpayer. Software that is intended to be used to provide noncomputer services to customers is internal-use software, while software that is to be used to provide computer services is not developed primarily for internal use. Computer services are services offered by a taxpayer to customers who do business with the taxpayer primarily for the use of the taxpayer's computer or software technology. Noncomputer services are services offered by a taxpayer to customers who do business with the taxpayer primarily to obtain a service other than a computer service, even if such other service is enabled, supported, or facilitated by computer or software technology.

The conclusion that software used to provide noncomputer services is internal-use software is consistent with the legislative history to the 1986 Act, which defined internal-use software as software used in general administrative functions and software used in providing noncomputer services (such as accounting, consulting, or banking services). See H.R. Conf. Rep. No. 841, at II-73 (emphasis added).

As noted above, the final regulations contain a new exception under which a taxpayer is not required to establish that internal-use software used to provide noncomputer services containing features or improvements that are not yet offered by a taxpayer's competitors satisfies the three-part test. Software that is intended to be used to provide noncomputer services is described within the exception if the software is designed to provide customers a new feature with respect to a noncomputer service; the taxpayer reasonably anticipated that customers would choose to obtain the noncomputer service from the taxpayer (rather than from the taxpayer's competitors) because of those features of the service that will be provided by the software; and those features are not available (at

the time the research is undertaken) from any of the taxpayer's competitors.

No inference should be drawn that software described within the foregoing exception is not internal-use software or that internal-use software not described within the exception would fail the three-part test. Rather, the exception reflects a determination by IRS and Treasury that it is appropriate to exercise the regulatory authority in section 41(d)(4)(E) to exempt certain internal-use software from having to fulfil additional conditions for credit eligibility. This exercise of regulatory authority is based on a determination that the development of software containing features or improvements that are not available from a taxpayer's competitors and that provide a demonstrable competitive advantage is more likely to increase the innovative qualities and efficiency of the U.S. economy (by generating knowledge that can be used by other service providers) than is the development of software used to provide noncomputer services containing features or improvements that are already offered by others. IRS and Treasury believe that drawing such a line is an appropriate way to administer the credit with a view to identifying and facilitating the credit availability for software with the greatest potential for benefitting the U.S. economy, an important rationale for the research credit.

The final regulations also make a number of changes with respect to the three-part high threshold of innovation test, which continues to apply to certain software not described within the new exception. For example, commentators had questioned whether the 1997 proposed regulations impose a separate high threshold of innovation requirement that serves as an additional condition for credit eligibility, even where taxpayers otherwise satisfy the three-part test. The final regulations clarify that the three-part test is the high threshold of innovation test, and not a separate requirement. Similarly, commentators had objected to a sentence in the 1997 proposed regulations that could be read to suggest that certain internal-use software could never qualify for the credit. The final regulations clarify that research with respect to internal-use software that satisfies both the general conditions for credit eligibility and the three-part test is eligible for the credit.

Consistent with the application of the discovery requirement, the final regulations adopt the suggestion of several commentators that the three-part test should be applied without regard to whether the taxpayer succeeds in

achieving the results described in that test.

Commentators questioned whether the "as where" clauses used to elaborate on the three requirements of the high threshold of innovation test in the 1997 proposed regulations were intended as mandatory requirements or merely as illustrations of ways in which taxpayers could satisfy the tests. By replacing the "as where" clauses with "in that" clauses, the final regulations confirm that a taxpayer must satisfy the provisions, as elaborated. Consistent with this clarification, the final regulations provide that the innovative prong of the three-part test may be satisfied with respect to any intended improvement, not just reductions in cost or improvements in speed.

Under the final regulations, all qualified research, including research with respect to internal-use software, must satisfy the discovery requirement (that is, must be intended to exceed, expand, or refine the common knowledge of skilled professionals in the particular field of science or engineering). The final regulations clarify how the three-part high threshold of innovation test supplements the discovery requirement. Specifically, the final regulations provide that several aspects of the three-part test (the determination of whether the software is intended to result in an improvement that is substantial and economically significant and the extent of uncertainty and technical risk) also must be applied with respect to the common knowledge of skilled professionals. In essence, the common knowledge of skilled professionals rather than the knowledge base of the taxpayer's employees is treated as the baseline with respect to which the intended software must satisfy the innovative prong and other prongs of the three-part test. Stated differently, research with respect to internal-use software is credit eligible only if it is intended to exceed, expand, or refine the common knowledge of skilled professionals (as defined in § 1.41-4(a)(3)(ii)) to a degree that is substantial and economically significant. See *Norwest* 110 T.C. at 499-500 (stating that " * * * the extent of the improvements required by Congress with respect to internal use software is much greater than that required in other fields" and that " * * * the significant economic risk test requires a higher threshold of technological advancement in the development of internal use software than in other fields").

Reference to the common knowledge of skilled professionals as the baseline is necessary to give proper meaning to

the statutory three-part test. For example, if the innovative requirement was applied simply with respect to the prior state of the taxpayer's own business, then ordinary inventory software installed by a taxpayer who previously tracked its inventory manually could be deemed to satisfy the innovative requirement merely because the taxpayer had achieved a substantial and economically significant improvement in speed over its prior non-automated operations.

Although the final regulations related to internal use software generally are effective for taxable years beginning after December 31, 1985, the provisions relating to software developed for use in providing computer and noncomputer services to customers and the provisions clarifying the interaction of the three-part test with the discovery requirement, like other provisions concerning the discovery requirement, are effective only prospectively; however, taxpayers may rely on these rules for expenditures paid or incurred prior to January 3, 2001.

X. Alternative Incremental Credit

Certain commentators suggested that taxpayers be permitted to elect the alternative incremental credit on an amended return. However, IRS and Treasury believe that the intended incentive effects of the credit would not be advanced by permitting taxpayers to make retroactive elections to alter the computation of (and presumably increase) the credit for prior years. Similarly, the availability of a retroactive election would undermine the application of section 41(c)(4)(B). Thus, the final regulations retain the requirement contained in the proposed regulations that the election to apply the provisions of the alternative incremental credit must be made on the taxpayer's timely filed original return.

Effective Dates

In general, the regulations are applicable for expenditures paid or incurred on or after January 3, 2001. However, the regulations addressing the base amount are applicable for taxable years beginning on or after January 3, 2001. The regulations addressing internal-use software are applicable for taxable years beginning after December 31, 1985. However, § 1.41-4(c)(6)(ii)(C)(4), § 1.41-4(c)(6)(iv)(A) and (B), § 1.41-4(c)(6)(v), the second and third sentences of § 1.41-4(c)(6)(vii), and § 1.41-4(c)(6)(viii) *Example 2* are applicable for expenditures paid or incurred on or after January 3, 2001. The special documentation requirements of § 1.41-4(d) are applicable with respect

to research projects that begin on or after March 5, 2001. The regulations providing for the election and revocation of the alternative incremental credit are applicable for taxable years ending on or after January 3, 2001. No inference should be drawn from the applicability date concerning the application of section 41 to expenditures paid or incurred or the computation of the base amount before the applicability date.

Special Analyses

It has been determined that these regulations are not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations.

It is hereby certified that the collection of information contained in these regulations will not have a significant economic impact on a substantial number of small entities. This certification is based on the fact that the rules of this section impact only taxpayers who engage in qualified research. Moreover, in those instances where the rules of this section impact small entities, the economic impact is not likely to be significant because it merely requires taxpayers to (1) prepare (before or during the early stages of a research project) and retain written documentation describing the principal questions to be answered and the information the taxpayer seeks to obtain that satisfies the requirements of § 1.41-4(a)(3) of these regulations; (2) elect on Form 6765, "Credit for Increasing Research Activities," to use the alternative incremental credit if the entity desires to use that method; and (3) obtain permission to revoke the alternative incremental credit election, if so desired. Further, the economic impact of electing the alternative incremental credit on Form 6765 also would not be significant because the election is made on the same form and is based on the same information that is used to claim the research credit. Accordingly, a regulatory flexibility analysis under the Regulatory Flexibility Act (5 U.S.C. chapter 6) is not required.

Pursuant to section 7805(f), the notice of proposed rulemaking preceding these regulations was submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on its impact on small business.

Drafting Information

The principal authors of these regulations are Lisa J. Shuman and Leslie H. Finlow of the Office of the Associate Chief Counsel (Passthroughs and Special Industries), IRS. However, personnel from other offices of the IRS and the Treasury Department participated in their development.

Adoption of Amendments to the Regulations

Accordingly, 26 CFR parts 1 and 602 are amended as follows:

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

§ 1.30— [Amended]

Par. 2. Revise the undesignated centerheading immediately before § 1.30-1 to read as follows:

Credits Allowable Under Sections 30 Through 44B

Par. 3. Remove the undesignated centerheading immediately before § 1.41-0.

Par. 4. Section 1.41-0 is revised to read as follows:

§ 1.41-0 Table of contents.

This section lists the paragraphs contained in §§ 1.41-1 through 1.41-8 as follows:

§ 1.41-1 Credit for increasing research activities.

- (a) Amount of credit.
- (b) Introduction to regulations under section 41.

§ 1.41-2 Qualified research expenses.

- (a) Trade or business requirement.
 - (1) In general.
 - (2) New business.
 - (3) Research performed for others.
 - (i) Taxpayer not entitled to results.
 - (ii) Taxpayer entitled to results.
 - (4) Partnerships.
 - (i) In general.
 - (ii) Special rule for certain partnerships and joint ventures.
- (b) Supplies and personal property used in the conduct of qualified research.
 - (1) In general.
 - (2) Certain utility charges.
 - (i) In general.
 - (ii) Extraordinary expenditures.
 - (3) Right to use personal property.
 - (4) Use of personal property in taxable years beginning after December 31, 1985.
- (c) Qualified services.
 - (1) Engaging in qualified research.
 - (2) Direct supervision.
 - (3) Direct support.
 - (d) Wages paid for qualified services.
 - (1) In general.
 - (2) "Substantially all."
 - (e) Contract research expenses.

- (1) In general.
 - (2) Performance of qualified research.
 - (3) "On behalf of."
 - (4) Prepaid amounts.
 - (5) Examples.
- § 1.41-3 Base amount for taxable years beginning on or after January 3, 2001.**
- (a) New taxpayers.
 - (b) Special rules for short taxable years.
 - (1) Short credit year.
 - (2) Short taxable year preceding credit year.
 - (3) Short taxable year in determining fixed-base percentage.
 - (c) Definition of gross receipts.
 - (1) In general.
 - (2) Amounts excluded.
 - (3) Foreign corporations.
 - (d) Consistency requirement.
 - (1) In general.
 - (2) Illustrations.
 - (e) Effective date.
- § 1.41-4 Qualified research for expenditures paid or incurred on or after January 3, 2001.**
- (a) Qualified research.
 - (1) General rule.
 - (2) Requirements of section 41(d)(1).
 - (3) Undertaken for the purpose of discovering information.
 - (i) In general.
 - (ii) Common knowledge.
 - (iii) Means of discovery.
 - (iv) Patent safe harbor.
 - (v) Rebuttable presumption.
 - (4) Technological in nature.
 - (5) Process of experimentation.
 - (6) Substantially all requirement.
 - (7) Use of computers and information technology.
 - (8) Illustrations.
 - (b) Application of requirements for qualified research.
 - (1) In general.
 - (2) Shrinking-back rule.
 - (3) Illustration.
 - (c) Excluded activities.
 - (1) In general.
 - (2) Research after commercial production.
 - (i) In general.
 - (ii) Certain additional activities related to the business component.
 - (iii) Activities related to production process or technique.
 - (iv) Clinical testing.
 - (3) Adaptation of existing business components.
 - (4) Duplication of existing business component.
 - (5) Surveys, studies, research relating to management functions, etc.
 - (6) Internal-use computer software.
 - (i) General rule.
 - (ii) Requirements.
 - (iii) Primarily for internal use.
 - (iv) Software used in the provision of services.
 - (A) Computer services.
 - (B) Noncomputer services.
 - (v) Exception for certain software used in providing noncomputer services.
 - (vi) High threshold of innovation test.
 - (vii) Application of high threshold of innovation test.
 - (viii) Illustrations.
 - (ix) Effective dates.

- (7) Activities outside the United States, Puerto Rico, and other possessions.
 - (i) In general.
 - (ii) Apportionment of in-house research expenses.
 - (iii) Apportionment of contract research expenses.
 - (8) Research in the social sciences, etc.
 - (9) Research funded by any grant, contract, or otherwise.
 - (10) Illustrations.
 - (d) Documentation.
 - (e) Effective dates.
- § 1.41-5 Basic research for taxable years beginning after December 31, 1986.**
[Reserved]
- § 1.41-6 Aggregation of expenditures.**
- (a) Controlled group of corporations; trades or businesses under common control.
 - (1) In general.
 - (2) Definition of trade or business.
 - (3) Determination of common control.
 - (4) Examples.
 - (b) Minimum base period research expenses.
 - (c) Tax accounting periods used.
 - (1) In general.
 - (2) Special rule where timing of research is manipulated.
 - (d) Membership during taxable year in more than one group.
 - (e) Intra-group transactions.
 - (1) In general.
 - (2) In-house research expenses.
 - (3) Contract research expenses.
 - (4) Lease payments.
 - (5) Payment for supplies.
- § 1.41-7 Special rules.**
- (a) Allocations.
 - (1) Corporation making an election under subchapter S.
 - (i) Pass-through, for taxable years beginning after December 31, 1982, in the case of an S corporation.
 - (ii) Pass-through, for taxable years beginning before January 1, 1983, in the case of a subchapter S corporation.
 - (2) Pass-through in the case of an estate or trust.
 - (3) Pass-through in the case of a partnership.
 - (i) In general.
 - (ii) Certain expenditures by joint ventures.
 - (4) Year in which taken into account.
 - (5) Credit allowed subject to limitation.
 - (b) Adjustments for certain acquisitions and dispositions—Meaning of terms.
 - (c) Special rule for pass-through of credit.
 - (d) Carryback and carryover of unused credits.

§ 1.41-8 Special rules for taxable years ending on or after January 3, 2001.

- (a) Alternative incremental credit.
- (b) Election.
- (1) In general.
- (2) Time and manner of election.
- (3) Revocation.
- (4) Effective date.

Par. 5. Section 1.41-1 is revised to read as follows:

§ 1.41-1 Credit for increasing research activities.

- (a) *Amount of credit.* The amount of a taxpayer's credit is determined under

section 41(a). For taxable years beginning after June 30, 1996, and at the election of the taxpayer, the portion of the credit determined under section 41(a)(1) may be calculated using the alternative incremental credit set forth in section 41(c)(4).

(b) *Introduction to regulations under section 41.* (1) Sections 1.41-2 through 1.41-8 and 1.41-3A through 1.41-5A address only certain provisions of section 41. The following table identifies the provisions of section 41 that are addressed, and lists each provision with the section of the regulations in which it is covered.

Section of the regulation	Section of the Internal Revenue Code
§ 1.41-2	41(b).
§ 1.41-3	41(c).
§ 1.41-4	41(d).
§ 1.41-5	41(e).
§ 1.41-6	41(f).
§ 1.41-7	41(f).
§ 1.41-8	41(g).
§ 1.41-3A	41(c).
§ 1.41-4A	41(c) (taxable years beginning before January 1, 1990).
§ 1.41-5A	41(d) (taxable years beginning before January 1, 1986).
	41(e) (taxable years beginning before January 1, 1987).

(2) Section 1.41-3A also addresses the special rule in section 221(d)(2) of the Economic Recovery Tax Act of 1981 relating to taxable years overlapping the effective dates of section 41. Section 41 was formerly designated as sections 30 and 44F. Sections 1.41-0 through 1.41-8 and 1.41-0A through 1.41-5A refer to these sections as section 41 for conformity purposes. Whether section 41, former section 30, or former section 44F applies to a particular expenditure depends upon when the expenditure was paid or incurred.

§ 1.41-2 [Amended]

Par. 6. Section 1.41-2 is amended as follows:

1. The last sentence of paragraph (a)(3)(i) is amended by removing the language "§ 1.41-5(d)(2)" and adding "§ 1.41-4A(d)(2)" in its place.

2. The last sentence of paragraph (a)(3)(ii) is amended by removing the language "§ 1.41-5(d)(3)" and adding "§ 1.41-4A(d)(3)" in its place.

3. The last sentence of paragraph (a)(4)(ii)(F) is amended by removing the language "§ 1.41-9(a)(3)(ii)" and adding "§ 1.41-7(a)(3)(ii)" in its place.

4. Paragraph (e)(1)(i) is amended by removing the language "§ 1.41-5" and

adding “§ 1.41–4 or 1.41–4A, whichever is applicable” in its place.

§§ 1.41–0A through 1.41–8A [Removed]

Par. 6A. Sections 1.41–0A through 1.41–8A and the undesignated centerheading preceding these sections are removed.

Par. 7. An undesignated centerheading is added immediately following § 1.44B–1 to read as follows:

Research Credit—For Taxable Years Beginning Before January 1, 1990

§ 1.41–3 [Redesignated as § 1.41–3A]

Par. 8. Section 1.41–3 is redesignated as § 1.41–3A and added under the new undesignated centerheading “RESEARCH CREDIT—FOR TAXABLE YEARS BEGINNING BEFORE JANUARY 1, 1990.”

Par. 9. New § 1.41–3 is added to read as follows:

§ 1.41–3 Base amount for taxable years beginning on or after January 3, 2001.

(a) *New taxpayers.* If, with respect to any credit year, the taxpayer has not been in existence for any previous taxable year, the average annual gross receipts of the taxpayer for the four taxable years preceding the credit year shall be zero. If, with respect to any credit year, the taxpayer has been in existence for at least one previous taxable year, but has not been in existence for four taxable years preceding the taxable year, then the average annual gross receipts of the taxpayer for the four taxable years preceding the credit year shall be the average annual gross receipts for the number of taxable years preceding the credit year for which the taxpayer has been in existence.

(b) *Special rules for short taxable years—(1) Short credit year.* If a credit year is a short taxable year, then the base amount determined under section 41(c)(1) (but not section 41(c)(2)) shall be modified by multiplying that amount by the number of months in the short taxable year and dividing the result by 12.

(2) *Short taxable year preceding credit year.* If one or more of the four taxable years preceding the credit year is a short taxable year, then the gross receipts for such year are deemed to be equal to the gross receipts actually derived in that year multiplied by 12 and divided by the number of months in that year.

(3) *Short taxable year in determining fixed-base percentage.* No adjustment shall be made on account of a short taxable year to the computation of a taxpayer's fixed-base percentage.

(c) *Definition of gross receipts—(1) In general.* For purposes of section 41,

gross receipts means the total amount, as determined under the taxpayer's method of accounting, derived by the taxpayer from all its activities and from all sources (e.g., revenues derived from the sale of inventory before reduction for cost of goods sold).

(2) *Amounts excluded.* For purposes of this paragraph (c), gross receipts do not include amounts representing—

(i) Returns or allowances;

(ii) Receipts from the sale or exchange of capital assets, as defined in section 1221;

(iii) Repayments of loans or similar instruments (e.g., a repayment of the principal amount of a loan held by a commercial lender);

(iv) Receipts from a sale or exchange not in the ordinary course of business, such as the sale of an entire trade or business or the sale of property used in a trade or business as defined under section 1221(2);

(v) Amounts received with respect to sales tax or other similar state and local taxes if, under the applicable state or local law, the tax is legally imposed on the purchaser of the good or service, and the taxpayer merely collects and remits the tax to the taxing authority; and

(vi) Amounts received by a taxpayer in a taxable year that precedes the first taxable year in which the taxpayer derives more than \$25,000 in gross receipts other than investment income. For purposes of this paragraph (c)(2)(vi), investment income is interest or distributions with respect to stock (other than the stock of a 20-percent owned corporation as defined in section 243(c)(2)).

(3) *Foreign corporations.* For purposes of section 41, in the case of a foreign corporation, gross receipts include only gross receipts that are effectively connected with the conduct of a trade or business within the United States, the Commonwealth of Puerto Rico, or other possessions of the United States. See section 864(c) and applicable regulations thereunder for the definition of effectively connected income.

(d) *Consistency requirement—(1) In general.* In computing the credit for increasing research activities for taxable years beginning after December 31, 1989, qualified research expenses and gross receipts taken into account in computing a taxpayer's fixed-base percentage and a taxpayer's base amount must be determined on a basis consistent with the definition of qualified research expenses and gross receipts for the credit year, without regard to the law in effect for the taxable years taken into account in computing the fixed-base percentage or the base amount. This consistency requirement

applies even if the period for filing a claim for credit or refund has expired for any taxable year taken into account in computing the fixed-base percentage or the base amount.

(2) *Illustrations.* The following examples illustrate the application of the consistency rule of paragraph (d)(1) of this section:

Example 1. (i) X, an accrual method taxpayer using the calendar year as its taxable year, incurs qualified research expenses in 2001. X wants to compute its research credit under section 41 for the tax year ending December 31, 2001. As part of the computation, X must determine its fixed-base percentage, which depends in part on X's qualified research expenses incurred during the fixed-base period, the taxable years beginning after December 31, 1983, and before January 1, 1989.

(ii) During the fixed-base period, X reported the following amounts as qualified research expenses on its Form 6765:

1984	\$100x
1985	120x
1986	150x
1987	180x
1988	170x
Total	720x

(iii) For the taxable years ending December 31, 1984, and December 31, 1985, X based the amounts reported as qualified research expenses on the definition of qualified research in effect for those taxable years. The definition of qualified research changed for taxable years beginning after December 31, 1985. If X used the definition of qualified research applicable to its taxable year ending December 31, 2001, the credit year, its qualified research expenses for the taxable years ending December 31, 1984, and December 31, 1985, would be reduced to \$ 80x and \$ 100x, respectively. Under the consistency rule in section 41(c)(5) and paragraph (d)(1) of this section, to compute the research credit for the tax year ending December 31, 2001, X must reduce its qualified research expenses for 1984 and 1985 to reflect the change in the definition of qualified research for taxable years beginning after December 31, 1985. Thus, X's total qualified research expenses for the fixed-base period (1984–1988) to be used in computing the fixed-base percentage is \$80 + 100 + 150 + 180 + 170 = \$680x.

Example 2. The facts are the same as in *Example 1*, except that, in computing its qualified research expenses for the taxable year ending December 31, 2001, X claimed that a certain type of expenditure incurred in 2001 was a qualified research expense. X's claim reflected a change in X's position, because X had not previously claimed that similar expenditures were qualified research expenses. The consistency rule requires X to adjust its qualified research expenses in computing the fixed-base percentage to include any similar expenditures not treated as qualified research expenses during the fixed-base period, regardless of whether the period for filing a claim for credit or refund has expired for any year taken into account in computing the fixed-base percentage.

(e) *Effective date.* The rules in paragraphs (c) and (d) of this section are applicable for taxable years beginning on or after the date final regulations are published in the **Federal Register**.

Par. 10. Section 1.41-4 is revised to read as follows:

§ 1.41-4 Qualified research for expenditures paid or incurred on or after January 3, 2001.

(a) *Qualified research*—(1) *General rule.* Research activities related to the development or improvement of a business component constitute qualified research only if the research activities meet all of the requirements of section 41(d)(1) and this section, and are not otherwise excluded under section 41(d)(3)(B) or (d)(4), or this section.

(2) *Requirements of section 41(d)(1).* Research constitutes qualified research only if it is research—

(i) With respect to which expenditures may be treated as expenses under section 174, see § 1.174-2;

(ii) That is undertaken for the purpose of discovering information that is technological in nature, and the application of which is intended to be useful in the development of a new or improved business component of the taxpayer; and

(iii) Substantially all of the activities of which constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability or quality.

For certain recordkeeping requirements, see paragraph (d) of this section.

(3) *Undertaken for the purpose of discovering information*—(i) *In general.* For purposes of section 41(d) and this section, research is undertaken for the purpose of discovering information only if it is undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering. A determination that research is undertaken for the purpose of discovering information does not require that the taxpayer succeed in obtaining the knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering, nor does it require that the advance sought be more than evolutionary. However, research is not undertaken for the purpose of discovering information merely because an expenditure may be treated as an expense under section 174.

(ii) *Common knowledge.* Common knowledge of skilled professionals in a particular field of science or engineering means information that should be known to skilled professionals had they

performed, before the research in question is undertaken, a reasonable investigation of the existing level of information in the particular field of science or engineering. Thus, knowledge may, in certain circumstances, exceed, expand, or refine the common knowledge of skilled professionals in a particular field of science or engineering even though such knowledge has previously been obtained by other persons. For example, trade secrets generally are not within the common knowledge of skilled professionals in a particular field of science or engineering because they are not reasonably available to skilled professionals not employed, hired, or licensed by the owner of such trade secrets.

(iii) *Means of discovery.* In seeking to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering, a taxpayer may employ existing technologies in a particular field and may rely on existing principles of science or engineering.

(iv) *Patent safe harbor.* For purposes of section 41(d) and paragraph (a)(3)(i) of this section, the issuance of a patent by the Patent and Trademark Office under the provisions of section 151 of title 35, United States Code (other than a patent for design issued under the provisions of section 171 of title 35, United States Code) is conclusive evidence that a taxpayer has obtained knowledge that exceeds, expands, or refines the common knowledge of skilled professionals. However, the issuance of such a patent is not a precondition for credit availability.

(v) *Rebuttable presumption.* If a taxpayer demonstrates with credible evidence that research activities were undertaken to obtain the information described in the taxpayer's contemporaneous documentation required under paragraph (d)(1) of this section, and if that documentation also sets forth the basis for the taxpayer's belief that obtaining this information would exceed, expand, or refine the common knowledge of skilled professionals in the particular field of science or engineering, the research activities are presumed to satisfy the requirements of this paragraph (a)(3). However, the presumption applies only if the taxpayer cooperates with reasonable requests by the Commissioner for witnesses, information, documents, meetings, and interviews. Furthermore, the Commissioner may overcome the presumption in this paragraph if the Commissioner demonstrates that the

information described in the taxpayer's documentation was within the common knowledge of skilled professionals (as described in paragraph (a)(3)(ii) of this section), or that the research activities were not undertaken to obtain the information described in the taxpayer's documentation.

(4) *Technological in nature.* For purposes of section 41(d) and this section, information is technological in nature if the process of experimentation used to discover such information fundamentally relies on principles of the physical or biological sciences, engineering, or computer science.

(5) *Process of experimentation.* For purposes of section 41(d) and this section, a process of experimentation is a process to evaluate more than one alternative designed to achieve a result where the capability or method of achieving that result is uncertain at the outset. A process of experimentation does not include the evaluation of alternatives to establish the appropriate design of a business component, if the capability and method for developing or improving the business component are not uncertain. A process of experimentation in the physical or biological sciences, engineering, or computer science may involve—

(i) Developing one or more hypotheses designed to achieve the intended result;

(ii) Designing an experiment (that, where appropriate to the particular field of research, is intended to be replicable with an established experimental control) to test and analyze those hypotheses (through, for example, modeling, simulation, or a systematic trial and error methodology);

(iii) Conducting the experiment; and

(iv) Refining or discarding the hypotheses as part of a sequential design process to develop or improve the business component.

(6) *Substantially all requirement.* The substantially all requirement of section 41(d)(1)(C) and paragraph (a)(2)(iii) of this section is satisfied only if 80 percent or more of the research activities, measured on a cost or other consistently applied reasonable basis (and without regard to § 1.41-2(d)(2)), constitute elements of a process of experimentation for a purpose described in section 41(d)(3). The substantially all requirement is applied separately to each business component.

(7) *Use of computers and information technology.* The employment of computers or information technology, or the reliance on principles of computer science or information technology to store, collect, manipulate, translate, disseminate, produce, distribute, or

process data or information, and similar uses of computers and information technology does not itself establish that qualified research has been undertaken.

(8) *Illustrations.* The following examples illustrate the application of this paragraph (a):

Example 1. (i) Facts. X and other manufacturing companies have previously designed and manufactured a particular kind of machine using Material S. Material T is less expensive than Material S. X wishes to design a new machine that appears and functions exactly the same as its existing machines, but that is made of Material T instead of Material S. The capability and method necessary to achieve this objective should not have been known to skilled professionals had they conducted a reasonable investigation of the existing information in the relevant field of science or engineering at the time the research was undertaken.

(ii) *Conclusion.* X's activities to design the new machine using Material T may be qualified research within the meaning of section 41(d)(1) and this paragraph (a). In seeking to design the machine, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering.

Example 2. (i) Facts. X is engaged in the business of developing and manufacturing widgets. X wants to manufacture an improved widget made out of a material that X has not previously used. Although X is uncertain how to use the material to manufacture an improved widget, the capability and method of using the material to manufacture such widgets should have been known to skilled professionals had they conducted a reasonable investigation of the existing level of information in the particular field of science or engineering at the time the research was undertaken.

(ii) *Conclusion.* Even though X's expenditures for the activities to resolve the uncertainty in manufacturing the improved widget may be treated as expenses for research activities under section 174 and § 1.174-2, X's activities to resolve the uncertainty in manufacturing the improved widget are not qualified research within the meaning of section 41(d) and this paragraph (a). Although X's activities were intended to eliminate uncertainty, the activities were not undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering.

Example 3. (i) Facts. X desires to build a bridge that can sustain greater traffic flow without deterioration than can existing bridges. The capability and method used to build such a bridge should not have been known to skilled professionals had they conducted a reasonable investigation of the existing level of information in the particular field of science or engineering at the time the research was undertaken. X eventually abandons the project after attempts to develop the technology prove unsuccessful.

(ii) *Conclusion.* X's activities to develop the technology to build the bridge may be qualified research within the meaning of section 41(d)(1) and this paragraph (a), regardless of the fact that X did not actually succeed in developing that technology. In seeking to develop the technology, X undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering.

Example 4. (i) Facts. The facts are the same as in *Example 3*, except that Y successfully builds a bridge that can sustain the greater traffic flow. Thereafter, Z seeks to build a bridge that can also sustain such greater traffic flow. The method Y used to build its bridge is a closely guarded trade secret that is not known to Z and should not have been known to skilled professionals had they conducted a reasonable investigation of the existing level of information in the particular field of science or engineering at the time the research was undertaken.

(ii) *Conclusion.* Z's activities to develop the technology to build the bridge may be qualified research within the meaning of section 41(d)(1) and this paragraph (a), even if it so happens that the technology Z used to build its bridge is similar or identical to the technology Y used. In developing the technology, Z undertook to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering.

Example 5. (i) Facts. X, a widget manufacturer, seeks to develop a new widget and initiates Project A. Before or during the early stages of Project A, X's employees prepare contemporaneous documentation that describes the principal questions to be answered by Project A and the information that X seeks to obtain to exceed, expand, or refine the common knowledge of skilled professionals in the relevant field of science or engineering. The documentation includes a statement from one of X's skilled professionals setting forth the basis for that professional's belief that the information is beyond the common knowledge of skilled professionals in the relevant field. Upon examination by the Commissioner, X presents credible evidence that the research activities were undertaken to obtain the information described in the contemporaneous documentation. X cooperates with all requests by the IRS for witnesses, information, documents, meetings, and interviews.

(ii) *Conclusion.* X's research activities with respect to Project A are presumed to be undertaken for the purpose of obtaining knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering. The Commissioner may overcome this presumption by demonstrating that the information X sought to obtain was within the common knowledge of skilled professionals in the relevant field of science or engineering (*i.e.*, by demonstrating that, at the time Project A began, the information should have been known to skilled professionals had they performed a

reasonable investigation of the existing level of knowledge in the relevant field).

(b) *Application of requirements for qualified research—(1) In general.* The requirements for qualified research in section 41(d)(1) and paragraph (a) of this section, must be applied separately to each business component, as defined in section 41(d)(2)(B). In cases involving development of both a product and a manufacturing or other commercial production process for the product, research activities relating to development of the process are not qualified research unless the requirements of section 41(d) and this section are met for the research activities relating to the process without taking into account the research activities relating to development of the product. Similarly, research activities relating to development of the product are not qualified research unless the requirements of section 41(d) and this section are met for the research activities relating to the product without taking into account the research activities relating to development of the manufacturing or other commercial production process.

(2) *Shrinking-back rule.* The requirements of section 41(d) and paragraph (a) of this section are to be applied first at the level of the discrete business component, that is, the product, process, computer software, technique, formula, or invention to be held for sale, lease, or license, or used by the taxpayer in a trade or business of the taxpayer. If the requirements for credit eligibility are met at that first level, then some or all of the taxpayer's research expenses are eligible for the credit. A special shrinking-back rule applies in the case where a taxpayer incurs some research expenses with respect to that discrete business component that would constitute qualified research expenses with respect to that business component but for the fact that less than substantially all of the research activities with respect to that component constitute elements of a process of experimentation that relates to a new or improved function, performance, reliability or quality. In such a case, the requirements for the credit are to be applied at the next most significant subset of elements of the business component. The shrinking-back of the applicable business component continues until a subset or series of subsets of elements of the business component satisfies substantially all requirements of section 41(d)(1)(C) and paragraph (a)(2)(iii) of this section (treating that subset of elements as a business component) or

the most basic element fails to satisfy the requirements. This shrinking-back rule is applied only if a taxpayer does not satisfy the requirements of section 41(d)(1)(C) and paragraph (a)(2)(iii) of this section with respect to the overall business component. The shrinking-back rule is not itself applied as a reason to exclude research activities from credit eligibility.

(3) *Illustration.* The following example illustrates the application of this paragraph (b):

(i) *Facts.* X, a widget manufacturer, develops a widget that is improved in several respects. Among the various improvements to the widget is an improvement to the widget's cooling mechanism. Although the capability and method of making the other improvements to the widget would have been known to skilled professionals had they conducted a reasonable investigation of the existing level of information in the particular field of science or engineering, the method of developing the improved cooling mechanism and of incorporating the improved mechanism into the widget would not have been known to skilled professionals had they conducted a reasonable investigation of the existing level of information in the particular field of science or engineering. Substantially all of X's research activities in improving the widget constitute elements of a process of experimentation for purposes of improving the performance of the widget. None of X's research activities in improving the widget are described in section 41(d)(4) or paragraph (c) of this section.

(ii) *Conclusion.* Some, but not all, of X's research activities in developing the improved widget are qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section. In seeking to improve the widget, some of X's activities (related to improving the cooling mechanism and incorporating the improved cooling mechanism into the widget) were undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering. However, other activities (related to the other improvements) were not undertaken to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in the relevant field of science or engineering, and thus are not qualified research and are not eligible for the credit. Not all of X's research activities relating to the widget are eligible for the credit because some of the activities are not qualified research as defined in section 41(d) and paragraph (a) of this section, even though the widget qualifies as a business component with respect to which qualified research that satisfies the requirements of section 41(d) and paragraph (a) of this section is undertaken.

(c) *Excluded activities—(1) In general.* Qualified research does not include any activity described in section 41(d)(4) and paragraph (c) of this section.

(2) *Research after commercial production—(i) In general.* Activities

conducted after the beginning of commercial production of a business component are not qualified research. Activities are conducted after the beginning of commercial production of a business component if such activities are conducted after the component is developed to the point where it is ready for commercial sale or use, or meets the basic functional and economic requirements of the taxpayer for the component's sale or use.

(ii) *Certain additional activities related to the business component.* The following activities are deemed to occur after the beginning of commercial production of a business component—

(A) Preproduction planning for a finished business component;

(B) Tooling-up for production;

(C) Trial production runs;

(D) Trouble shooting involving detecting faults in production equipment or processes;

(E) Accumulating data relating to production processes; and

(F) Debugging flaws in a business component.

(iii) *Activities related to production process or technique.* In cases involving development of both a product and a manufacturing or other commercial production process for the product, the exclusion described in section 41(d)(4)(A) and paragraphs (c)(2)(i) and (ii) of this section applies separately for the activities relating to the development of the product and the activities relating to the development of the process. For example, even after a product meets the taxpayer's basic functional and economic requirements, activities relating to the development of the manufacturing process still may constitute qualified research, provided that the development of the process itself separately satisfies the requirements of section 41(d) and this section, and the activities are conducted before the process meets the taxpayer's basic functional and economic requirements or is ready for commercial use.

(iv) *Clinical testing.* Clinical testing of a pharmaceutical product prior to its commercial production in the United States is not treated as occurring after the beginning of commercial production even if the product is commercially available in other countries. Additional clinical testing of a pharmaceutical product after a product has been approved for a specific therapeutic use by the Food and Drug Administration and is ready for commercial production and sale are not treated as occurring after the beginning of commercial production if such clinical tests are undertaken to establish new functional

uses, characteristics, indications, combinations, dosages, or delivery forms for the product. A functional use, characteristic, indication, combination, dosage or delivery form shall be considered new only if such functional use, characteristic, indication, combination, dosage or delivery form must be approved by the Food and Drug Administration.

(3) *Adaptation of existing business components.* Activities relating to adapting an existing business component to a particular customer's requirement or need are not qualified research. This exclusion does not apply merely because a business component is intended for a specific customer.

(4) *Duplication of existing business component.* Activities relating to reproducing an existing business component (in whole or in part) from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information about the business component are not qualified research. This exclusion does not apply merely because the taxpayer inspects an existing business component in the course of developing its own business component.

(5) *Surveys, studies, research relating to management functions, etc.* Qualified research does not include activities relating to—

(i) Efficiency surveys;

(ii) Management functions or techniques, including such items as preparation of financial data and analysis, development of employee training programs and management organization plans, and management-based changes in production processes (such as rearranging work stations on an assembly line);

(iii) Market research, testing, or development (including advertising or promotions);

(iv) Routine data collections; or

(v) Routine or ordinary testing or inspections for quality control.

(6) *Internal-use computer software—*

(i) *General rule.* Research with respect to computer software that is developed by (or for the benefit of) the taxpayer primarily for the taxpayer's internal use is eligible for the research credit only if the software satisfies the requirements of paragraph (c)(6)(ii) of this section.

(ii) *Requirements.* The requirements of this paragraph (c)(6)(ii) are—

(A) The research satisfies the requirements of section 41(d)(1);

(B) The research is not otherwise excluded under section 41(d)(4) (other than section 41(d)(4)(E)); and (C) One of the following conditions is met—

(1) The taxpayer develops the software for use in an activity that constitutes qualified research (other than the development of the internal-use software itself);

(2) The taxpayer develops the software for use in a production process that meets the requirements of section 41(d)(1);

(3) The taxpayer develops a new or improved package of computer software and hardware together as a single product, of which the software is an integral part, that is used directly by the taxpayer in providing technological services in its trade or business to customers. In these cases, eligibility for the research credit is to be determined by examining the combined hardware-software product as a single product;

(4) The taxpayer develops the software for use in providing computer services to customers; or

(5) The software satisfies the high threshold of innovation test of paragraph (c)(6)(vi) of this section.

(iii) *Primarily for internal use.* Software is developed primarily for the taxpayer's internal use if the software is to be used internally, for example, in general administrative functions of the taxpayer (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting or banking services). If computer software is developed primarily for the taxpayer's internal use, the requirements of paragraph (c)(6) apply even though the taxpayer intends to, or subsequently does, sell, lease, or license the computer software.

(iv) *Software used in the provision of services—(A) Computer services.* For purposes of this section, a computer service is a service offered by a taxpayer to customers who conduct business with the taxpayer primarily for the use of the taxpayer's computer or software technology. A taxpayer does not provide a computer service merely because customers interact with the taxpayer's software.

(B) *Noncomputer services.* For purposes of this section, a noncomputer service is a service offered by a taxpayer to customers who conduct business with the taxpayer primarily to obtain a service other than a computer service, even if such other service is enabled, supported, or facilitated by computer or software technology.

(v) *Exception for certain software used in providing noncomputer services.* The requirements of paragraph (c)(6)(ii)(C) of this section are deemed satisfied for research with respect to computer software if, at the time the research was undertaken—

(A) The software is designed to provide customers a new feature with respect to a noncomputer service;

(B) The taxpayer reasonably anticipated that customers would choose to obtain the noncomputer service from the taxpayer (rather than from the taxpayer's competitors) because of those new features provided by the software; and (C) Those new features were not available from any of the taxpayer's competitors.

(vi) *High threshold of innovation test.* Computer software satisfies the high threshold of innovation test of this paragraph (c)(6)(vi) only if the taxpayer can establish that—

(A) The software is innovative in that the software is intended to result in a reduction in cost, improvement in speed, or other improvement, that is substantial and economically significant;

(B) The software development involves significant economic risk in that the taxpayer commits substantial resources to the development and there is a substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period; and

(C) The software is not commercially available for use by the taxpayer in that the software cannot be purchased, leased, or licensed and used for the intended purpose without modifications that would satisfy the requirements of paragraphs (c)(6)(vi)(A) and (B) of this section.

(vii) *Application of high threshold of innovation test.* In determining if the high threshold of innovation test of paragraph (c)(6)(vi) of this section is satisfied, all of the facts and circumstances are considered. The determination of whether the software is intended to result in an improvement or cost reduction that is substantial and economically significant is based on a comparison of the intended result with software that is within the common knowledge of skilled professionals in the relevant field of science or engineering, see § 1.41-4(a)(3)(ii). Similarly, the extent of uncertainty and technical risk is determined with respect to the common knowledge of skilled professionals in the relevant field of science or engineering. Further, in determining if the high threshold of innovation test of paragraph (c)(6)(vi) of this section is satisfied, the activities to develop the new or improved software are considered independent of the effect of any modifications to related hardware or other software.

(viii) *Illustrations.* The following examples illustrate the application of this paragraph (c)(6):

Example 1. (i) Facts. X is engaged in the business of manufacturing and selling widgets to wholesalers. X has experienced strong growth and at the same time has expanded its product offerings. X also has increased significantly the size of its business by expanding into new territories. The increase in the size and scope of its business has strained X's existing financial management systems such that management can no longer obtain timely comprehensive financial data. Accordingly, X undertakes the development of a financial management computer software system that is more appropriate to its newly expanded operations.

(ii) *Conclusion.* X's new computer software system is developed by X primarily for X's internal use. X's activities to develop the new computer software system may be eligible for the research credit only if the computer software development activities satisfy the requirements of paragraph (c)(6)(ii) of this section.

Example 2. (i) Facts. X is engaged in the business of designing, manufacturing, and selling widgets. X delivers its widgets in the same manner and time as its competitors. In keeping with X's corporate commitment to provide customers with top quality service, X undertakes a project to develop for X's internal use a computer software system to facilitate the tracking of the manufacturing and delivery of widgets which will enable X's customers to monitor the progress of their orders and know precisely when their widgets will be delivered. X's computer software activities include research activities that satisfy the discovery requirement in section 41(d)(1) and paragraph (a)(3) of this section. At the time the research is undertaken, X reasonably anticipates that if it is successful, X will increase its market share as compared to X's competitors, none of which has such a tracking feature for its delivery system.

(ii) *Conclusion.* Although X's computer software system is developed primarily for X's internal use, X's activities are excepted from the high threshold of innovation test of paragraph (c)(6)(vi) of this section because, at the time the research is undertaken, X's software is designed to provide improved tracking features, X reasonably anticipates that customers will purchase widgets from X because these improved tracking features, and because comparable tracking features are not available from any of X's competitors.

(ix) *Effective dates.* This paragraph (c)(6) is applicable for taxable years beginning after December 31, 1985, except paragraphs (c)(6)(ii)(C)(4), (c)(6)(iv)(A) and (B), (c)(6)(v), the second and third sentences of paragraph (c)(6)(vii), and paragraph (c)(6)(viii) *Example 2* of this section apply to expenditures paid or incurred on or after January 3, 2001.

(7) *Activities outside the United States, Puerto Rico, and other possessions—(i) In general.* Research conducted outside the United States, as defined in section 7701(a)(9), the Commonwealth of Puerto Rico and

other possessions of the United States does not constitute qualified research.

(ii) *Apportionment of in-house research expenses.* In-house research expenses paid or incurred for qualified services performed both (A) in the United States, the Commonwealth of Puerto Rico and other possessions of the United States and (B) outside the United States, the Commonwealth of Puerto Rico and other possessions of the United States must be apportioned between the services performed in the United States, the Commonwealth of Puerto Rico and other possessions of the United States and the services performed outside the United States, the Commonwealth of Puerto Rico and other possessions of the United States. Only those in-house research expenses apportioned to the services performed within the United States, the Commonwealth of Puerto Rico and other possessions of the United States are eligible to be treated as qualified research expenses, unless the in-house research expenses are wages and the 80 percent rule of § 1.41-2(d)(2) applies.

(iii) *Apportionment of contract research expenses.* If contract research is performed partly in the United States, the Commonwealth of Puerto Rico and other possessions of the United States and partly outside the United States, the Commonwealth of Puerto Rico and other possessions of the United States, only 65 percent (or 75 percent in the case of amounts paid to qualified research consortia) of the portion of the contract amount that is attributable to the research activity performed in the United States, the Commonwealth of Puerto Rico and other possessions of the United States may qualify as a contract research expense (even if 80 percent or more of the contract amount is for research performed in the United States, the Commonwealth of Puerto Rico and other possessions of the United States).

(8) *Research in the social sciences, etc.* Qualified research does not include research in the social sciences (including economics, business management, and behavioral sciences), arts, or humanities.

(9) *Research funded by any grant, contract, or otherwise.* Qualified research does not include any research to the extent funded by any grant, contract, or otherwise by another person (or governmental entity). To determine the extent to which research is so funded, § 1.41-4A(d) applies.

(10) *Illustrations.* The following examples illustrate provisions contained in paragraphs (c)(1) through (9) of this section. No inference should be drawn from these examples concerning the application of section 41(d)(1) and

paragraph (a) of this section to these facts. The examples are as follows:

Example 1. (i) *Facts.* X, a tire manufacturer, seeks to build a tire that will not deteriorate as rapidly under certain conditions of high speed and temperature as do existing tires. X commences laboratory research on January 1. On April 1, X determines in the laboratory that a certain combination of materials and additives can withstand higher rotational speeds and temperatures than the combination of materials and additives used in existing tires. On the basis of this determination, X undertakes further research activities to determine how to design a tire using those materials and additives, and to determine whether such a tire functions outside the laboratory as intended under various actual road conditions. By September 1, X's research has progressed to the point where the new tire meets X's basic functional and economic requirements.

(ii) *Conclusion.* Any research activities conducted by X after September 1 with respect to the design of the tire are not qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section because they are undertaken after the beginning of commercial production of the tire. Whether any activities X engaged in to develop a process for manufacturing the new tire constitute qualified research depends on if the development of the process itself separately satisfies the requirements of section 41(d) and paragraph (c)(2) of this section, and also depends on if the activities occur before the point in time when the process meets the taxpayer's basic functional and economic requirements or is ready for commercial use.

Example 2. (i) *Facts.* For several years, X has manufactured and sold a particular kind of widget. X initiates a new research project to develop an improved widget.

(ii) *Conclusion.* X's activities to develop an improved widget are not excluded from the definition of qualified research under section 41(d)(4)(A) and paragraph (c)(2) of this section until the beginning of commercial production of the improved widget. The fact that X's activities relating to the improved widget are undertaken after the beginning of commercial production of the unimproved widget does not bar the activities from credit eligibility because those activities constitute a new research project to develop a new business component, an improved widget.

Example 3. (i) *Facts.* X, a computer software development firm, owns all substantial rights in a general ledger accounting software core program that X markets and licenses to customers. X incurs expenditures in adapting the core software program to the requirements of C, one of X's customers.

(ii) *Conclusion.* Because X's activities represent activities to adapt an existing software program to a particular customer's requirement, X's activities are excluded from the definition of qualified research under section 41(d)(4)(B) and paragraph (c)(3) of this section.

Example 4. (i) *Facts.* The facts are the same as in *Example 3*, except that C pays X to

adapt the core software program to C's requirements.

(ii) *Conclusion.* Because X's activities are excluded from the definition of qualified research under section 41(d)(4)(B) and paragraph (c)(3) of this section, C's payments to X do not constitute contract research expenses under section 41(b)(3)(A).

Example 5. (i) *Facts.* The facts are the same as in *Example 3*, except that C's own employees adapt the core software program to C's requirements.

(ii) *Conclusion.* Because C's employees' activities are excluded from the definition of qualified research under section 41(d)(4)(B) and paragraph (c)(3) of this section, the wages C paid to its employees do not constitute in-house research expenses under section 41(b)(2)(A).

Example 6. (i) *Facts.* An existing gasoline additive is manufactured by Y using three ingredients, A, B, and C. X seeks to develop and manufacture its own gasoline additive that appears and functions in a manner similar to Y's additive. To develop its own additive, X first inspects the composition of Y's additive, and uses knowledge gained from the inspection to reproduce A and B in the laboratory. Any differences between ingredients A and B that are used in Y's additive and those reproduced by X are insignificant and are not material to the viability, effectiveness, or cost of A and B. X desires to use with A and B an ingredient that has a materially lower cost than ingredient C. Accordingly, X engages in a process of experimentation to discover potential alternative formulations of the additive (*i.e.*, the development and use of various ingredients other than C to use with A and B).

(ii) *Conclusion.* X's activities in analyzing and reproducing ingredients A and B involve duplication of existing business components and are excluded from qualified research under section 41(d)(4)(C) and paragraph (c)(4) of this section. X's experimentation activities to discover potential alternative formulations of the additive do not involve duplication of an existing business component and are not excluded from qualified research under section 41(d)(4)(C) and paragraph (c)(4) of this section.

Example 7. (i) *Facts.* X, an insurance company, develops a new life insurance product. In the course of developing the product, X engages in research with respect to the effect of pricing and tax consequences on demand for the product, the expected volatility of interest rates, and the expected mortality rates (based on published data and prior insurance claims).

(ii) *Conclusion.* X's activities related to the new product represent research in the social sciences, and are thus excluded from qualified research under section 41(d)(4)(G) and paragraph (c)(8) of this section.

(d) *Documentation.* No credit shall be allowed under section 41 with regard to an expenditure relating to a research project unless the taxpayer—

(1) Prepares documentation before or during the early stages of the research

project, that describes the principal questions to be answered and the information the taxpayer seeks to obtain to satisfy the requirements of paragraph (a)(3) of this section, and retains that documentation on paper or electronically in the manner prescribed in applicable regulations, revenue rulings, revenue procedures, or other appropriate guidance until such time as taxes may no longer be assessed (except under section 6501(c)(1), (2), or (3)) for any year in which the taxpayer claims to have qualified research expenditures in connection with the research project; and

(2) Satisfies section 6001 and the regulations thereunder.

(e) *Effective dates.* In general, the rules of this section are applicable for expenditures paid or incurred on or after January 3, 2001. The rules of paragraph (d), however, apply to research projects that begin on or after March 5, 2001.

§ 1.41-5 [Redesignated as § 1.41-4A, and Amended]

Par. 11. Section 1.41-5 is redesignated as § 1.41-4A, and the last sentence of paragraph (d)(1) is amended by removing the language “§ 1.41-8(e)” and adding “§ 1.41-6(e)” in its place.

§ 1.41-6 [Redesignated as § 1.41-5, and Amended]

Par. 12. Section 1.41-6 is redesignated as § 1.41-5 and the section heading is amended by removing the language “December 31, 1985” and adding “December 31, 1986” in its place.

§ 1.41-7 [Redesignated as § 1.41-5A, and Amended]

Par. 13. Section 1.41-7 is redesignated as § 1.41-5A, and amended as follows:

1. The section heading is amended by removing the language “January 1, 1986” and adding “January 1, 1987” in its place.

2. Paragraph (e)(2) is amended by removing the language “§ 1.41-5(c)” and adding “1.41-4A(c)” in its place.

§ 1.41-8 [Redesignated as § 1.41-6, and Amended]

Par. 14. Section 1.41-8 is redesignated as § 1.41-6, and the last sentence of paragraph (c) is amended by removing the language “§ 1.41-3, except that § 1.41-3(c)(2)” and adding “§ 1.41-3A, except that § 1.41-3A(c)(2)” in its place.

§ 1.41-9 [Redesignated as § 1.41-7]

Par. 15. Section 1.41-9 is redesignated as § 1.41-7.

Par. 16. New § 1.41-8 is added to read as follows:

§ 1.41-8 Special rules for taxable years ending on or after January 3, 2001.

(a) *Alternative incremental credit.* At the election of the taxpayer, the credit determined under section 41(a)(1) equals the amount determined under section 41(c)(4).

(b) *Election—(1) In general.* A taxpayer may elect to apply the provisions of the alternative incremental credit in section 41(c)(4) for any taxable year of the taxpayer beginning after June 30, 1996. If a taxpayer makes an election under section 41(c)(4), the election applies to the taxable year for which made and all subsequent taxable years.

(2) *Time and manner of election.* An election under section 41(c)(4) is made by completing the portion of Form 6765, “Credit for Increasing Research Activities,” relating to the election of the alternative incremental credit, and attaching the completed form to the taxpayer’s timely filed original return (including extensions) for the taxable year to which the election applies.

(3) *Revocation.* An election under this section may not be revoked except with the consent of the Commissioner. A taxpayer must attach the Commissioner’s consent to revoke an election under section 41(c)(4) to the taxpayer’s timely filed original return (including extensions) for the taxable year of the revocation.

(4) *Effective date.* Paragraphs (b)(2) and (3) of this section are applicable for taxable years ending on or after January 3, 2001.

Par. 17. Section 1.41-0A is added under the new undesignated centerheading “RESEARCH CREDIT—FOR TAXABLE YEARS BEGINNING BEFORE JANUARY 1, 1990” to read as follows:

§ 1.41-0A Table of contents.

This section lists the paragraphs contained in §§ 1.41-0A, 1.41-3A, 1.41-4A and 1.41-5A.

§ 1.41-0A Table of contents.

§ 1.41-3A Base period research expense.

- (a) Number of years in base period.
- (b) New taxpayers.
- (c) Definition of base period research expenses.
- (d) Special rules for short taxable years.
 - (1) Short determination year.
 - (2) Short base period year.
- (3) Years overlapping the effective dates of section 41 (section 44F).
 - (i) Determination years.
 - (ii) Base period years.
- (4) Number of months in a short taxable year.
- (e) Examples.

§ 1.41-4A Qualified research for taxable years beginning before January 1, 1986.

- (a) General rule.
- (b) Activities outside the United States.
 - (1) In-house research.
 - (2) Contract research.
 - (c) Social sciences or humanities.
 - (d) Research funded by any grant, contract, or otherwise.
 - (1) In general.
 - (2) Research in which taxpayer retains no rights.
 - (3) Research in which the taxpayer retains substantial rights.
 - (i) In general.
 - (ii) Pro rata allocation.
 - (iii) Project-by-project determination.
 - (4) Independent research and development under the Federal Acquisition Regulations System and similar provisions.
 - (5) Funding determinable only in subsequent taxable year.
 - (6) Examples.

§ 1.41-5A Basic research for taxable years beginning before January 1, 1987.

- (a) In general.
- (b) Trade or business requirement.
- (c) Prepaid amounts.
 - (1) In general.
 - (2) Transfers of property.
 - (d) Written research agreement.
 - (1) In general.
 - (2) Agreement between a corporation and a qualified organization after June 30, 1983.
 - (i) In general.
 - (ii) Transfers of property.
 - (3) Agreement between a qualified fund and a qualified educational organization after June 30, 1983.
 - (e) Exclusions.
 - (1) Research conducted outside the United States.
 - (2) Research in the social sciences or humanities.
 - (f) Procedure for making an election to be treated as a qualified fund.

§ 1.218-0 [Removed]

Par. 18. Section 1.218-0 is removed.

§ 1.482-7 [Amended]

Par. 19. In § 1.482-7, the sixth sentence of paragraph (h)(1) is amended by removing the language “§ 1.41-8(e)” and adding “§ 1.41-6(e)” in its place.

PART 602—OMB CONTROL NUMBERS UNDER THE PAPERWORK REDUCTION ACT

Par. 20. The authority citation for part 602 continues to read as follows:

Authority: 26 U.S.C. 7805.

Par. 21. In § 602.101, paragraph (b) is amended by adding an entry to the table in numerical order to read as follows:

§ 602.101 OMB Control numbers.

- * * * * *
- (b) * * *

CFR part or section where identified and described	Current OMB control No.
* * *	* *
1.41-4(d)	1545-1625
* * *	* *
1.41-8(b)	1545-1625
* * *	* *

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

Approved: December 22, 2000.

Jonathan Talisman,

Acting Assistant Secretary of the Treasury.

[FR Doc. 00-33170 Filed 12-27-00; 12:33 pm]

BILLING CODE 4830-01-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-301086; FRL-6759-1]

RIN 2070-AB78

Clopyralid; Extension of Tolerance for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation extends a time-limited tolerance for residues of the herbicide clopyralid in or on cranberries at 2 parts per million (ppm) for an additional 2½-year period. This tolerance will expire and is revoked on December 31, 2003. This action is in response to EPA's granting of emergency exemptions under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizing use of the pesticide on cranberries. Section 408(l)(6) of the Federal Food, Drug, and Cosmetic Act (FFDCA) requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under section 18 of FIFRA.

DATES: This regulation is effective January 3, 2001. Objections and requests for hearings, identified by docket control number OPP-301086, must be received by EPA on or before March 5, 2001.

ADDRESSES: Written objections and hearing requests may be submitted by mail, in person, or by courier. Please follow the detailed instructions for each

method as provided in Unit III. of the **SUPPLEMENTARY INFORMATION.** To ensure proper receipt by EPA, your objections and hearing requests must identify docket control number OPP-301086 in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: By mail: Libby Pemberton, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (703) 308-9364; and e-mail address: pemberton.libby@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected categories and entities may include, but are not limited to:

Categories	NAICS codes	Examples of Potentially Affected Entities
Industry	111 112 311 32532	Crop production Animal production Food manufacturing Pesticide manufacturing

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether or not this action might apply to certain entities. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT.**

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically.* You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at <http://www.epa.gov/>. To access this document, on the Home Page select "Laws and Regulations," "Regulations and Proposed Rules," and then look up the entry for this document under the "**Federal Register**—Environmental Documents." You can also go directly to

the **Federal Register** listings at <http://www.epa.gov/fedrgstr/>.

2. *In person.* The Agency has established an official record for this action under docket control number OPP-301086. The official record consists of the documents specifically referenced in this action, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period is available for inspection in the Public Information and Records Integrity Branch (PIRIB), Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305-5805.

II. Background and Statutory Findings

EPA issued a final rule, published in the **Federal Register** of March 12, 1997 (62 FR 11360) (FRL-5593-1), which announced that on its own initiative under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, as amended by the Food Quality Protection Act of 1996 (FQPA) (Public Law 104-170) it established a time-limited tolerance for the residues of clopyralid in or on cranberries at 2 ppm, with an expiration date of July 31, 1998. EPA established the tolerance because section 408(l)(6) of the FFDCA requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under section 18 of FIFRA. Such tolerances can be established without providing notice or period for public comment. The tolerance was subsequently twice extended until January 31, 2000, in the **Federal Register** of April 29, 1998, (63 FR 23392) (FRL-5786-9) and July 31, 2001, in the **Federal Register** of March 24, 1999, (64 FR 14101) (FRL-6066-2).

EPA received a request to extend the use of clopyralid on cranberries for this year's growing season due to the continued need for control of various weeds. Cancellations of the most effective registered alternatives have left growers with few tools to control weeds in a crop which cannot be cultivated.

After having reviewed the submission, EPA concurs that emergency conditions exist. EPA has authorized under FIFRA section 18 the use of clopyralid on cranberries for control of lotus, Douglas aster and clover in Oregon and Washington.

EPA assessed the potential risks presented by residues of clopyralid in or on cranberries. In doing so, EPA considered the safety standard in FFDCA section 408(b)(2), and decided that the necessary tolerance under FFDCA section 408(l)(6) would be consistent with the safety standard and with FIFRA section 18. The data and other relevant material have been evaluated and discussed in the final rule of March 12, 1997 (62 FR 11360) (FRL-5593-1). Based on that data and information considered, the Agency reaffirms that extension of the time-limited tolerance will continue to meet the requirements of section 408(l)(6). Therefore, the time-limited tolerance is extended for an additional 2½-year period. EPA will publish a document in the **Federal Register** to remove the revoked tolerance from the Code of Federal Regulations (CFR). Although this tolerance will expire and is revoked on December 31, 2003, under FFDCA section 408(l)(5), residues of the pesticide not in excess of the amounts specified in the tolerance remaining in or on cranberries after that date will not be unlawful, provided the pesticide is applied in a manner that was lawful under FIFRA and the application occurred prior to the revocation of the tolerance. EPA will take action to revoke this tolerance earlier if any experience with, scientific data on, or other relevant information on this pesticide indicate that the residues are not safe.

III. Objections and Hearing Requests

Under section 408(g) of the FFDCA, as amended by the FQPA, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. The EPA procedural regulations which govern the submission of objections and requests for hearings appear in 40 CFR part 178. Although the procedures in those regulations require some modification to reflect the amendments made to the FFDCA by the FQPA of 1996, EPA will continue to use those procedures, with appropriate adjustments, until the necessary modifications can be made. The new section 408(g) provides essentially the same process for persons to "object" to a regulation for an exemption from the requirement of a tolerance issued by EPA under new section 408(d), as was provided in the old FFDCA sections 408 and 409.

However, the period for filing objections is now 60 days, rather than 30 days.

A. What Do I Need to Do to File an Objection or Request a Hearing?

You must file your objection or request a hearing on this regulation in accordance with the instructions provided in this unit and in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket control number OPP-301086 in the subject line on the first page of your submission. All requests must be in writing, and must be mailed or delivered to the Hearing Clerk on or before March 5, 2001.

1. *Filing the request.* Your objection must specify the specific provisions in the regulation that you object to, and the grounds for the objections (40 CFR 178.25). If a hearing is requested, the objections must include a statement of the factual issues(s) on which a hearing is requested, the requestor's contentions on such issues, and a summary of any evidence relied upon by the objector (40 CFR 178.27). Information submitted in connection with an objection or hearing request may be claimed confidential by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the information that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice.

Mail your written request to: Office of the Hearing Clerk (1900), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. You may also deliver your request to the Office of the Hearing Clerk in Rm. C400, Waterside Mall, 401 M St., SW., Washington, DC 20460. The Office of the Hearing Clerk is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Office of the Hearing Clerk is (202) 260-4865.

2. *Tolerance fee payment.* If you file an objection or request a hearing, you must also pay the fee prescribed by 40 CFR 180.33(i) or request a waiver of that fee pursuant to 40 CFR 180.33(m). You must mail the fee to: EPA Headquarters Accounting Operations Branch, Office of Pesticide Programs, P.O. Box 360277M, Pittsburgh, PA 15251. Please identify the fee submission by labeling it "Tolerance Petition Fees."

EPA is authorized to waive any fee requirement "when in the judgement of the Administrator such a waiver or refund is equitable and not contrary to the purpose of this subsection." For additional information regarding the

waiver of these fees, you may contact James Tompkins by phone at (703) 305-5697, by e-mail at tompkins.jim@epa.gov, or by mailing a request for information to Mr. Tompkins at Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

If you would like to request a waiver of the tolerance objection fees, you must mail your request for such a waiver to: James Hollins, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

3. *Copies for the Docket.* In addition to filing an objection or hearing request with the Hearing Clerk as described in Unit III.A., you should also send a copy of your request to the PIRIB for its inclusion in the official record that is described in Unit I.B.2. Mail your copies, identified by docket control number OPP-301086, to: Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. In person or by courier, bring a copy to the location of the PIRIB described in Unit I.B.2. You may also send an electronic copy of your request via e-mail to: opp-docket@epa.gov. Please use an ASCII file format and avoid the use of special characters and any form of encryption. Copies of electronic objections and hearing requests will also be accepted on disks in WordPerfect 6.1/8.0 or ASCII file format. Do not include any CBI in your electronic copy. You may also submit an electronic copy of your request at many Federal Depository Libraries.

B. When Will the Agency Grant a Request for a Hearing?

A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: There is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established resolve one or more of such issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issues(s) in the manner sought by the requestor would be adequate to justify the action requested (40 CFR 178.32).

IV. Regulatory Assessment Requirements

This final rule establishes a time-limited tolerance under FFDCA section

408. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, or impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104-4). Nor does it require any prior consultation as specified by Executive Order 13084, entitled *Consultation and Coordination with Indian Tribal Governments* (63 FR 27655, May 19, 1998); special considerations as required by Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994); or require OMB review or any Agency action under Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997). This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note). Since tolerances and exemptions that are established on the basis of a FIFRA section 18 petition under FFDCA section 408, such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) do not apply. In addition, the Agency has determined that this action will not have a substantial direct effect on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, entitled *Federalism* (64 FR 43255, August 10, 1999). Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the

distribution of power and responsibilities among the various levels of government." This final rule directly regulates growers, food processors, food handlers and food retailers, not States. This action does not alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4).

V. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of this final rule in the **Federal Register**. This final rule is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: December 19, 2000.

James Jones,

Director, Registration Division, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346(a) and 371.

§ 180.431 [Amended].

2. In § 180.431, amend the table in paragraph (b) by revising the "Expiration/revocation date" "7/31/01" for the commodity "Cranberries" to read "12/31/03".

[FR Doc. 01-25 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-S

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-301085; FRL-6757-9]

RIN 2070-AB78

Myclobutanil; Pesticide Tolerances for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes time-limited tolerances for combined residues of myclobutanil in or on sugarbeet roots, tops and by-products. This action is in response to the declaration of a crisis emergency exemption under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizing use of the pesticide on sugarbeets in the state of Idaho. This regulation establishes a maximum permissible level for residues of myclobutanil in these food commodities. The tolerances will expire and are revoked on December 31, 2002.

DATES: This regulation is effective January 3, 2001. Objections and requests for hearings, identified by docket control number OPP-301085, must be received by EPA on or before March 5, 2001.

ADDRESSES: Written objections and hearing requests may be submitted by mail, in person, or by courier. Please follow the detailed instructions for each method as provided in Unit VII. of the **SUPPLEMENTARY INFORMATION**. To ensure proper receipt by EPA, your objections and hearing requests must identify docket control number OPP-301085 in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: By mail: Libby Pemberton, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (703) 308-9364; and e-mail address: pemberton.libby@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected categories and entities may include, but are not limited to:

Categories	NAICS codes	Examples of potentially affected entities
Industry	111 112 311 32532	Crop production Animal production Food manufacturing Pesticide manufacturing

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether or not this action might apply to certain entities. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of This Document and Other Related Documents?

1. *Electronically.* You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at <http://www.epa.gov/>. To access this document, on the Home Page select "Laws and Regulations," "Regulations and Proposed Rules," and then look up the entry for this document under the "**Federal Register**—Environmental Documents." You can also go directly to the **Federal Register** listings at <http://www.epa.gov/fedrgstr/>. To access the OPPTS Harmonized Guidelines referenced in this document, go directly to the guidelines at <http://www.epa.gov/opptsfrs/home/guidelin.htm>.

2. *In person.* The Agency has established an official record for this action under docket control number OPP-301085. The official record consists of the documents specifically referenced in this action, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period is available for inspection in the Public Information and Records Integrity Branch (PIRIB),

Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305-5805.

II. Background and Statutory Findings

EPA, on its own initiative, in accordance with sections 408(e) and 408(l)(6) of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, is establishing tolerances for combined residues of the fungicide myclobutanil in or on beet, sugar, roots at 0.05 part per million (ppm); beet, sugar, tops at 1.0 ppm; beet, sugar, dried pulp at 1.0 ppm; beet, sugar, molasses at 1.0 ppm; and beet, sugar, refined sugar at 0.70 ppm. These tolerances will expire and are revoked on December 31, 2002. EPA will publish a document in the **Federal Register** to remove the revoked tolerances from the Code of Federal Regulations.

Section 408(l)(6) of the FFDCA requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under section 18 of FIFRA. Such tolerances can be established without providing notice or period for public comment. EPA does not intend for its actions on section 18 related tolerances to set binding precedents for the application of section 408 and the new safety standard to other tolerances and exemptions. Section 408(e) of the FFDCA allows EPA to establish a tolerance or an exemption from the requirement of a tolerance on its own initiative, i.e., without having received any petition from an outside party.

Section 408(b)(2)(A)(i) of the FFDCA allows EPA to establish a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is "safe." Section 408(b)(2)(A)(ii) defines "safe" to mean that "there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information." This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408(b)(2)(C) requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to "ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate

exposure to the pesticide chemical residue. . . ."

Section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) authorizes EPA to exempt any Federal or State agency from any provision of FIFRA, if EPA determines that "emergency conditions exist which require such exemption." This provision was not amended by the Food Quality Protection Act (FQPA). EPA has established regulations governing such emergency exemptions in 40 CFR part 166.

III. Emergency Exemption for Myclobutanil on Sugarbeets and FFDCA Tolerances

EPA has authorized under FIFRA section 18 the use of myclobutanil on sugarbeets for control of powdery mildew in Idaho. After having reviewed the submission, EPA concurs that emergency conditions exist for this State.

As part of its assessment of this emergency exemption, EPA assessed the potential risks presented by residues of myclobutanil in or on sugar beets and sugar beet byproducts. In doing so, EPA considered the safety standard in FFDCA section 408(b)(2), and EPA decided that the necessary tolerance under FFDCA section 408(l)(6) would be consistent with the safety standard and with FIFRA section 18. Consistent with the need to move quickly on the emergency exemption in order to address an urgent non-routine situation and to ensure that the resulting food is safe and lawful, EPA is issuing these tolerances without notice and opportunity for public comment as provided in section 408(l)(6). Although these tolerances will expire and are revoked on December 31, 2002, under FFDCA section 408(l)(5), residues of the pesticide not in excess of the amounts specified in the tolerances remaining in or on sugar beets and the sugar beet byproducts after that date will not be unlawful, provided the pesticide is applied in a manner that was lawful under FIFRA, and the residues do not exceed a level that was authorized by these tolerances at the time of that application. EPA will take action to revoke these tolerances earlier if any experience with, scientific data on, or other relevant information on this pesticide indicate that the residues are not safe.

Because these tolerances are being approved under emergency conditions, EPA has not made any decisions about whether myclobutanil meets EPA's registration requirements for use on sugarbeets or whether permanent tolerances for this use would be

appropriate. Under these circumstances, EPA does not believe that these tolerances serve as a basis for registration of myclobutanil by a State for special local needs under FIFRA section 24(c). Nor do these tolerances serve as the basis for any State other than Idaho to use this pesticide on this crop under section 18 of FIFRA without following all provisions of EPA's regulations implementing section 18 as identified in 40 CFR part 166. For additional information regarding the emergency exemption for myclobutanil, contact the Agency's Registration Division at the address provided under **FOR FURTHER INFORMATION CONTACT.**

IV. Aggregate Risk Assessment and Determination of Safety

EPA performs a number of analyses to determine the risks from aggregate exposure to pesticide residues. For further discussion of the regulatory requirements of section 408 and a complete description of the risk assessment process, see the final rule on Bifenthrin Pesticide Tolerances (62 FR 62961, November 26, 1997) (FRL-5754-7).

Consistent with section 408(b)(2)(D), EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of myclobutanil and to make a determination on aggregate exposure, consistent with section 408(b)(2), for time-limited tolerances for combined residues of myclobutanil in or on beet, sugar, roots at 0.05 ppm; beet, sugar,

tops at 1.0 ppm; beet, sugar, dried pulp at 1.0 ppm; beet, sugar, molasses at 1.0 ppm; and beet, sugar, refined sugar at 0.70 ppm.

EPA's assessment of the dietary exposures and risks associated with establishing the tolerances follows.

A. Toxicological Endpoints

The dose at which no adverse effects are observed (the NOAEL) from the toxicology study identified as appropriate for use in risk assessment is used to estimate the toxicological endpoint. However, the lowest dose at which adverse effects of concern are identified (the LOAEL) is sometimes used for risk assessment if no NOAEL was achieved in the toxicology study selected. An uncertainty factor (UF) is applied to reflect uncertainties inherent in the extrapolation from laboratory animal data to humans and in the variations in sensitivity among members of the human population as well as other unknowns. An UF of 100 is routinely used, 10X to account for interspecies differences and 10X for intraspecies differences.

For dietary risk assessment (other than cancer) the Agency uses the UF to calculate an acute or chronic reference dose (RfD) where the RfD is equal to the NOAEL divided by the appropriate UF ($RfD = NOAEL/UF$). Where an additional safety factor is retained due to concerns unique to the FQPA, this additional factor is applied to the RfD by dividing the RfD by such additional factor. The acute or chronic Population Adjusted Dose (aPAD or cPAD) is a

modification of the RfD to accommodate this type of FQPA Safety Factor.

For non-dietary risk assessments (other than cancer) the UF is used to determine the level of concern (LOC). For example, when 100 is the appropriate UF (10X to account for interspecies differences and 10X for intraspecies differences) the LOC is 100. To estimate risk, a ratio of the NOAEL to exposures (margin of exposure (MOE) = $NOAEL/exposure$) is calculated and compared to the LOC.

The linear default risk methodology (Q^*) is the primary method currently used by the Agency to quantify carcinogenic risk. The Q^* approach assumes that any amount of exposure will lead to some degree of cancer risk. A Q^* is calculated and used to estimate risk which represents a probability of occurrence of additional cancer cases (e.g., risk is expressed as 1×10^{-6} or one in a million). Under certain specific circumstances, MOE calculations will be used for the carcinogenic risk assessment. In this non-linear approach, a "point of departure" is identified below which carcinogenic effects are not expected. The point of departure is typically a NOAEL based on an endpoint related to cancer effects though it may be a different value derived from the dose response curve. To estimate risk, a ratio of the point of departure to exposure ($MOE_{cancer} = \text{point of departure}/\text{exposures}$) is calculated. A summary of the toxicological endpoints for myclobutanil used for human risk assessment is shown in the following Table 1:

TABLE 1.—SUMMARY OF TOXICOLOGICAL DOSE AND ENDPOINTS FOR MYCLOBUTANIL FOR USE IN HUMAN RISK ASSESSMENT

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF ¹ and LOC for Risk Assessment	Study and Toxicological Effects
Acute Dietary females 13–50 years of age	NOAEL = 60 mg/kg/day UF = 100 Acute RfD = 0.60 mg/kg/day	FQPA SF = 1 aPAD = acute RfD FQPA SF = 0.60 mg/kg/day	Developmental Toxicity - rabbit ² LOAEL = 200 mg/kg/day based on increased resorptions, decreased litter size and a decrease in the viability index.
Acute Dietary general population including infants and children	none	not applicable	not applicable
Chronic Dietary all populations	NOAEL = 2.49 mg/kg/day UF = 100 Chronic RfD = 0.025 mg/kg/day	FQPA SF = 1 cPAD = chronic RfD FQPA SF = 0.025 mg/kg/day	Chronic Toxicity/ Carcinogenicity - rat LOAEL = 9.94 mg/kg/day based on decreased testicular weights and increased testicular atrophy.
Short-Term Dermal (1–7 days) (Occupational/Residential)	dermal study NOAEL = 100 mg/kg/day	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	28-day Dermal Toxicity- rat LOAEL = >100 mg/kg/day based on no signs of toxicity at the high dose of 100 mg/kg a.i.

TABLE 1.—SUMMARY OF TOXICOLOGICAL DOSE AND ENDPOINTS FOR MYCLOBUTANIL FOR USE IN HUMAN RISK ASSESSMENT—Continued

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF ¹ and LOC for Risk Assessment	Study and Toxicological Effects
Intermediate-Term Dermal (1 week–several months) (Occupational/Residential)	oral study NOAEL= 10 mg/kg/day (dermal absorption rate = 50%)	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	2-Generation Reproduction Toxicity - rat LOAEL = 50 mg/kg/day based on atrophy of the testes and prostate as well as an increase in the number of stillborn pups and a decrease in pup weight gain during lactation.
Long-Term Dermal (several months - lifetime) (Occupational/Residential)	oral study NOAEL= 2.49 mg/kg/day (dermal absorption rate = 50%)	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	Chronic Toxicity/Carcinogenicity - rat LOAEL = 9.94 mg/kg/day based on decreased testicular weights and increased testicular atrophy.
Short-Term Inhalation (1–7 days) (Occupational/Residential)	oral study NOAEL= 10 mg/kg/day (inhalation absorption rate = 100%)	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	2-Generation Reproduction Toxicity - rat LOAEL = 50 mg/kg/day based on atrophy of the testes and prostate as well as an increase in the number of stillborn pups and a decrease in pup weight gain during lactation.
Intermediate-Term Inhalation (1 week - several months) (Occupational/Residential)	oral study NOAEL= 10 mg/kg/day (inhalation absorption rate = 100%)	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	2-Generation Reproduction Toxicity - rat LOAEL = 50 mg/kg/day based on atrophy of the testes and prostate as well as an increase in the number of stillborn pups and a decrease in pup weight gain during lactation.
Long-Term Inhalation (several months - lifetime) (Occupational/Residential)	oral study NOAEL= 2.49 mg/kg/day (inhalation absorption rate = 100%)	Acceptable MOE = 100 (Occupational) Acceptable MOE = 100 (Residential, includes the FQPA SF)	Chronic Toxicity/ Carcinogenicity - rat LOAEL = 9.94 mg/kg/day based on decreased testicular weights and increased testicular atrophy.
Cancer (oral, dermal, inhalation)	"Group E"	not applicable	not applicable

¹ The reference to the FQPA Safety Factor refers to any additional safety factor retained due to concerns unique to the FQPA.

² The HIARC document (dated 9/2/99) table incorrectly lists this as rat.

B. Exposure Assessment

1. *Dietary exposure from food and feed uses.* Tolerances have been established (40 CFR 180.443) for the combined residues of myclobutanil, [α-butyl-α-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile] plus its alcohol metabolite [α-(3-hydroxybutyl)-α-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile] (free and bound), in or on a variety of raw agricultural commodities at levels ranging from 25.0 ppm in raisin waste to 0.02 ppm in cottonseed. Tolerances have also been established (40 CFR 180.443(b)) for the combined residues of myclobutanil plus its alcohol metabolite (free and bound) and diol metabolite [α-(4-chlorophenyl)-α-(3,4-dihydroxybutyl)-1H-1,2,4-triazole-1-propanenitrile], in meat, milk, poultry and eggs, at levels ranging from

0.02 ppm to 1.0 ppm. Risk assessments were conducted by EPA to assess dietary exposures from myclobutanil in food as follows:

i. *Acute exposure.* Acute dietary risk assessments are performed for a food-use pesticide if a toxicological study has indicated the possibility of an effect of concern occurring as a result of a one day or single exposure. The Dietary Exposure Evaluation Model (DEEM®) analysis evaluated the individual food consumption as reported by respondents in the USDA 1989–1992 nationwide Continuing Surveys of Food Intake by Individuals (CSFII) and accumulated exposure to the chemical for each commodity. The following assumptions were made for the acute exposure assessments: The acute analysis was performed for females 13–50 years old using published and

proposed tolerance level residues and 100% CT for all commodities. Therefore, the acute risk was analyzed at the 95th percentile. The aPAD for females 13–50 years old is 0.6 mg/kg/day. For acute dietary risk, EPA's level of concern is >100% aPAD. No acute dietary exposure analysis was performed for the general U.S. population, including infants and children, because no endpoint was chosen for these population subgroups.

ii. *Chronic exposure.* In conducting this chronic dietary risk assessment the DEEM® analysis evaluated the individual food consumption as reported by respondents in the USDA 1989–1992 nationwide Continuing Surveys of Food Intake by Individuals (CSFII) and accumulated exposure to the chemical for each commodity. The following assumptions were made for

the chronic exposure assessments: The chronic analysis was performed using published and proposed tolerance levels for all commodities. For the chronic analysis, percent CT information was used for apples, apricots, cherries, grapes, nectarines, peaches, pears, plums, and cotton and 100% CT was assumed for all other commodities.

iii. *Anticipated residue and percent crop treated information.* Section 408(b)(2)(F) states that the Agency may use data on the actual percent of food treated for assessing chronic dietary risk only if the Agency can make the following findings: Condition 1, that the data used are reliable and provide a valid basis to show what percentage of the food derived from such crop is likely to contain such pesticide residue; Condition 2, that the exposure estimate does not underestimate exposure for any significant subpopulation group; and Condition 3, if data are available on pesticide use and food consumption in a particular area, the exposure estimate does not understate exposure for the population in such area. In addition, the Agency must provide for periodic evaluation of any estimates used. To provide for the periodic evaluation of the estimate of percent crop treated (PCT) as required by section 408(b)(2)(F), EPA may require registrants to submit data on PCT.

The Agency used PCT information as follows: apples at 40%, apricots at 15%, cherries at 40%, grapes at 45%, nectarines at 20%, peaches at 10%, plums at 15% and cotton at 1%.

The Agency believes that the three conditions listed above have been met. With respect to Condition 1, PCT estimates are derived from Federal and private market survey data, which are reliable and have a valid basis. EPA uses a weighted average PCT for chronic dietary exposure estimates. This weighted average PCT figure is derived by averaging State-level data for a period of up to 10 years, and weighting for the more robust and recent data. A weighted average of the PCT reasonably represents a person's dietary exposure over a lifetime, and is unlikely to underestimate exposure to an individual because of the fact that pesticide use patterns (both regionally and nationally) tend to change continuously over time, such that an individual is unlikely to be exposed to more than the average PCT over a lifetime. For acute dietary exposure estimates, EPA uses an estimated maximum PCT. The exposure estimates resulting from this approach reasonably represent the highest levels to which an individual could be exposed, and are unlikely to underestimate an individual's acute

dietary exposure. The Agency is reasonably certain that the percentage of the food treated is not likely to be an underestimation. As to Conditions 2 and 3, regional consumption information and consumption information for significant subpopulations is taken into account through EPA's computer-based model for evaluating the exposure of significant subpopulations including several regional groups. Use of this consumption information in EPA's risk assessment process ensures that EPA's exposure estimate does not understate exposure for any significant subpopulation group and allows the Agency to be reasonably certain that no regional population is exposed to residue levels higher than those estimated by the Agency. Other than the data available through national food consumption surveys, EPA does not have available information on the regional consumption of food to which myclobutanil may be applied in a particular area.

2. *Dietary exposure from drinking water.* The Agency lacks sufficient monitoring exposure data to complete a comprehensive dietary exposure analysis and risk assessment for myclobutanil in drinking water. Because the Agency does not have comprehensive monitoring data, drinking water concentration estimates are made by reliance on simulation or modeling taking into account data on the physical characteristics of myclobutanil.

The Agency uses the Generic Estimated Environmental Concentration (GENEEC) or the Pesticide Root Zone/Exposure Analysis Modeling System (PRZM/EXAMS) to estimate pesticide concentrations in surface water and SCI-GROW, which predicts pesticide concentrations in groundwater. In general, EPA will use GENEEC (a tier 1 model) before using PRZM/EXAMS (a tier 2 model) for a screening-level assessment for surface water. The GENEEC model is a subset of the PRZM/EXAMS model that uses a specific high-end runoff scenario for pesticides. GENEEC incorporates a farm pond scenario, while PRZM/EXAMS incorporate an index reservoir environment in place of the previous pond scenario. The PRZM/EXAMS model includes a percent crop area factor as an adjustment to account for the maximum percent crop coverage within a watershed or drainage basin.

None of these models include consideration of the impact processing (mixing, dilution, or treatment) of raw water for distribution as drinking water would likely have on the removal of pesticides from the source water. The

primary use of these models by the Agency at this stage is to provide a coarse screen for sorting out pesticides for which it is highly unlikely that drinking water concentrations would ever exceed human health levels of concern.

Since the models used are considered to be screening tools in the risk assessment process, the Agency does not use estimated environmental concentrations (EECs) from these models to quantify drinking water exposure and risk as a %RfD or %PAD. Instead drinking water levels of comparison (DWLOCs) are calculated and used as a point of comparison against the model estimates of a pesticide's concentration in water. DWLOCs are theoretical upper limits on a pesticide's concentration in drinking water in light of total aggregate exposure to a pesticide in food, and from residential uses. Since DWLOCs address total aggregate exposure to myclobutanil they are further discussed in the aggregate risk sections below.

Based on the GENEEC and SCI-GROW models the estimated environmental concentrations (EECs) of myclobutanil for acute exposures are estimated to be 115 parts per billion (ppb) for surface water and 2 ppb for ground water. The EECs for chronic exposures are estimated to be 92 ppb for surface water and 2 ppb for ground water.

3. *From non-dietary exposure.* Myclobutanil is currently registered for use on the following residential non-dietary sites: Homeowner use on turf, roses, flowers, shrubs and trees. The term "residential exposure" is used in this document to refer to non-occupation, nondietary exposure resulting from pesticide uses in residential settings (e.g., pesticide uses for lawn and garden pest control, indoor pest control, termiticides, and flea and tick control on pets.) The risk assessment was conducted using the following exposure assumptions:

i. *Residential handler exposure.* Based on the residential use- patterns associated with myclobutanil, there is potential for exposures to handlers of myclobutanil. In order to present a high-end scenario of residential exposure, it was assumed that one person would complete all mixing, loading and application of myclobutanil. Exposure scenarios were assessed, at the maximum application rate, for mixing, loading, and application of a soluble concentrate product by trigger bottle sprayer (treating ornamental plants), and by hose-end sprayer (treating turfgrass) to represent the worst-case scenario for the proposed uses. There are no chemical specific data available

to support the residential use scenarios of myclobutanil. Therefore, modeling (PHED v 1.1 surrogate table) was used to represent the highest potential for exposure from homeowner application of myclobutanil.

ii. *Residential post application exposure.* Potential residential exposures are expected following applications to lawns, ornamentals and home garden sites. Chemical-specific data are available to determine the potential risks from post-application activities. The registrant submitted a dislodgeable foliar residue (DFR) study on grapes for myclobutanil. Short-term post-application exposure estimates were done using the study determined DFR of 0.175 µg/cm² (on day 0). For intermediate-term post-application exposure, an average of DFRs from day 0 through day 14 was used. The post-application risk assessment is based on DFR data from the submitted study on grapes and generic assumptions as specified by the recently revised Residential SOPs.

Based on the use pattern, exposure to myclobutanil-treated ornamentals is expected to be incidental and short-term. Both short- and intermediate-term exposures are expected following lawn applications of myclobutanil. Short-term aggregate post-application exposure for the adult was done for dermal exposure to treated turf and ornamentals. Since there is no intermediate-term exposure for the residential handler, there is no aggregate intermediate-term exposure for the adult.

Short-term, non-dietary ingestion exposure to toddlers is not assessed since EPA did not detect an acute dietary or oral endpoint applicable to infants and children. Therefore, EPA does not expect short-term non-dietary exposure to pose a risk to infants and children. The only short-term toddler exposure that was considered consists of dermal post-application exposure. However, EPA determined that the short-term dermal exposure should not be aggregated with the short-term oral exposure because the toxic effects are different.

Additionally, intermediate-term, non-dietary ingestion exposure for toddlers is possible and was assessed using the intermediate-term dose and endpoint identified from the two generation reproduction toxicity study in rats. Intermediate-term aggregate exposure for toddlers combines non-dietary ingestion and dermal exposure from treated turf.

4. *Cumulative exposure to substances with a common mechanism of toxicity.* Section 408(b)(2)(D)(v) requires that,

when considering whether to establish, modify, or revoke a tolerance, the Agency consider "available information" concerning the cumulative effects of a particular pesticide's residues and "other substances that have a common mechanism of toxicity."

EPA does not have, at this time, available data to determine whether myclobutanil has a common mechanism of toxicity with other substances or how to include this pesticide in a cumulative risk assessment. Unlike other pesticides for which EPA has followed a cumulative risk approach based on a common mechanism of toxicity, myclobutanil does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has not assumed that myclobutanil has a common mechanism of toxicity with other substances. For information regarding EPA's efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see the final rule for Bifenthrin Pesticide Tolerances (62 FR 62961, November 26, 1997).

C. Safety Factor for Infants and Children

1. *In general.* FFDCA section 408 provides that EPA shall apply an additional tenfold margin of safety for infants and children in the case of threshold effects to account for prenatal and postnatal toxicity and the completeness of the data base on toxicity and exposure unless EPA determines that a different margin of safety will be safe for infants and children. Margins of safety are incorporated into EPA risk assessments either directly through use of a margin of exposure (MOE) analysis or through using uncertainty (safety) factors in calculating a dose level that poses no appreciable risk to humans.

2. *Prenatal and postnatal sensitivity.* There was no evidence of increased susceptibility in the developmental toxicity studies with rats and rabbits. The data from the 2-generation reproduction study in rats provided no indication of quantitative or qualitative increased susceptibility since maternal toxicity and reproductive toxicity occurred at the same dose.

3. *Conclusion.* There is a complete toxicity data base for myclobutanil and exposure data are complete or are estimated based on data that reasonably accounts for potential exposures.

EPA determined that the 10X safety factor to protect infants and children should be removed. The FQPA factor is removed because:

i. There are no toxicity or residential exposure data gaps in the consideration of the FQPA Safety Factor;

ii. There was no evidence of increased susceptibility in the developmental toxicity studies with rats and rabbits and the 2-generation reproduction study in rats provided no indication of quantitative or qualitative increased susceptibility since maternal toxicity and reproductive toxicity occurred at the same dose;

iii. A developmental neurotoxicity study is not required because neurotoxic compounds of similar structure were not identified and there was no evidence of neurotoxicity in the current toxicity data base; and

iv. The exposure assessments will not underestimate the potential dietary (food and drinking water) and residential (non-occupational) exposures for infants and children from the use of myclobutanil.

D. Aggregate Risks and Determination of Safety

To estimate total aggregate exposure to a pesticide from food, drinking water, and residential uses, the Agency calculates DWLOCs which are used as a point of comparison against the model estimates of a pesticide's concentration in water (EECs). DWLOC values are not regulatory standards for drinking water. DWLOCs are theoretical upper limits on a pesticide's concentration in drinking water in light of total aggregate exposure to a pesticide in food and residential uses. In calculating a DWLOC, the Agency determines how much of the acceptable exposure (i.e., the PAD) is available for exposure through drinking water e.g., allowable chronic water exposure (mg/kg/day) = cPAD - (average food + chronic non-dietary, non-occupational exposure). This allowable exposure through drinking water is used to calculate a DWLOC.

A DWLOC will vary depending on the toxic endpoint, drinking water consumption, and body weights. Default body weights and consumption values as used by the USEPA Office of Water are used to calculate DWLOCs: 2 Liters (L)/70 kg (adult male), 2L/60 kg (adult female), and 1L/10 kg (child). Default body weights and drinking water consumption values vary on an individual basis. This variation will be taken into account in more refined screening-level and quantitative drinking water exposure assessments. Different populations will have different DWLOCs. Generally, a DWLOC is calculated for each type of risk assessment used: acute, short-term, intermediate-term, chronic, and cancer.

When EECs for surface water and groundwater are less than the calculated DWLOCs, OPP concludes with reasonable certainty that exposures to myclobutanil in drinking water (when considered along with other sources of exposure for which OPP has reliable data) would not result in unacceptable levels of aggregate human health risk at this time. Because OPP considers the aggregate risk resulting from multiple exposure pathways associated with a

pesticide's uses, levels of comparison in drinking water may vary as those uses change. If new uses are added in the future, OPP will reassess the potential impacts of myclobutanil on drinking water as a part of the aggregate risk assessment process.

1. *Acute risk.* Using the exposure assumptions discussed in this unit for acute exposure, the acute dietary exposure from food to myclobutanil will occupy 2% of the aPAD for females 13

years and older. In addition, despite the potential for acute dietary exposure to myclobutanil in drinking water, after calculating DWLOCs and comparing them to conservative model estimated environmental concentrations of myclobutanil in surface and ground water, EPA does not expect the aggregate exposure to exceed 100% of the aPAD, as shown in the following Table 2:

TABLE 2.—AGGREGATE RISK ASSESSMENT FOR ACUTE EXPOSURE TO MYCLOBUTANIL

Population Subgroup	aPAD (mg/kg)	%aPAD (Food)	Surface Water EEC (ppb)	Ground Water EEC (ppb)	Acute DWLOC (ppb)
Females (13 to 50 years)	0.60	2	115	2	18000

2. *Chronic risk.* Using the exposure assumptions described in this unit for chronic exposure, EPA has concluded that exposure to myclobutanil from food will utilize 18% of the cPAD for the U.S. population, 50% of the cPAD for infants <1 year old and 54% of the cPAD for children 1 to 6 years old.

There are no residential uses for myclobutanil that result in chronic residential exposure to myclobutanil. In addition, despite the potential for chronic dietary exposure to myclobutanil in drinking water, after calculating DWLOCs and comparing them to conservative model estimated

environmental concentrations of myclobutanil in surface and ground water, EPA does not expect the aggregate exposure to exceed 100% of the cPAD, as shown in the following Table 3:

TABLE 3.—AGGREGATE RISK ASSESSMENT FOR CHRONIC (NON- CANCER) EXPOSURE TO MYCLOBUTANIL

Population Subgroup	cPAD mg/kg/day	%cPAD (Food)	Surface Water EEC (ppb)	Ground Water EEC (ppb)	Chronic DWLOC (ppb)
U.S. Population	0.025	18	31	2	720
All infants (1 year old)	0.025	50	31	2	130
Children 1 to 6 years	0.025	54	31	2	120
Children 7 to 12 years	0.025	27	31	2	180

3. *Short-term risk.* Short-term aggregate exposure takes into account residential exposure plus chronic exposure to food and water (considered to be a background exposure level). EPA has determined that oral and dermal exposures can not be aggregated due to differences in the toxicological endpoints via the oral (developmental study) and dermal routes. Therefore, short-term aggregate risk is captured by assessment of acute risk above.

4. *Intermediate-term risk.* Intermediate-term aggregate exposure takes into account non-dietary, non-

occupational exposure plus chronic exposure to food and water (considered to be a background exposure level). Myclobutanil is currently registered for use(s) that could result in intermediate-term residential exposure and the Agency has determined that it is appropriate to aggregate chronic food and water and intermediate-term exposures for myclobutanil.

Using the exposure assumptions described in this unit for intermediate-term exposures, EPA has concluded that food and residential exposures aggregated result in aggregate MOEs of

650 for the U.S. population and 300 for infants and children. These aggregate MOEs do not exceed the Agency's level of concern for aggregate exposure to food and residential uses. In addition, intermediate-term DWLOCs were calculated and compared to the EECs for chronic exposure of myclobutanil in ground water and surface water. After calculating DWLOCs and comparing them to the EECs for surface and ground water, EPA does not expect intermediate-term aggregate exposure to exceed the Agency's level of concern, as shown in the following Table 4:

TABLE 4.—AGGREGATE RISK ASSESSMENT FOR INTERMEDIATE-TERM EXPOSURE TO MYCLOBUTANIL

Population Subgroup	Aggregate MOE (Food + Residential)	Aggregate Level of Concern (LOC)	Surface Water EEC (ppb)	Ground Water EEC (ppb)	Intermediate-Term DWLOC (ppb)
U.S. Population	650	100	31	2	3000
Infants and Children	300	100	31	2	670

5. *Aggregate cancer risk for U.S. population.* Myclobutanil is not carcinogenic in either the rat or mouse and, therefore, is not expected to pose a cancer risk to humans.

6. *Determination of safety.* Based on these risk assessments, EPA concludes that there is a reasonable certainty that no harm will result to the general population, and to infants and children from aggregate exposure to myclobutanil residues.

V. Other Considerations

A. Analytical Enforcement Methodology

An adequate enforcement method (Rohm and Haas Method 34S-88-10) is available to enforce the proposed tolerances. Quantitation is by GLC using a nitrogen/phosphorus detector for myclobutanil and an electron capture detector (Ni63) for residues measured as the alcohol metabolite. The method may be requested from: Calvin Furlow, PRRIB, IRSD (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (703) 305-5229; e-mail address: furlow.calvin@epa.gov.

B. International Residue Limits

There are no CODEX, Canadian, or Mexican Maximum Residue Limits (MRL) for myclobutanil on sugar beets. Thus, harmonization is not an issue for this section 18.

C. Conditions

For permanent tolerances and a section 3 registration, the petitioner must submit adequate residue field trial data. A final decision on the appropriate tolerance levels will be withheld pending submission of the requisite residue data. The submitted residue data support a 28-day PHI. No processed commodity data were submitted in support of the emergency exemption request. Therefore, in order to represent the worst case scenario, maximum theoretical concentration factors were used to determine the appropriate tolerances on sugar beet processed commodities. Adequate processed commodity data must be submitted for registration and permanent tolerances. Once these data are submitted and reviewed, EPA will determine if tolerances on sugar beet processed commodities are needed.

VI. Conclusion

Therefore, the tolerance is established for combined residues of myclobutanil, in or on beet, sugar, roots at 0.05 ppm; beet, sugar, tops at 1.0 ppm; beet, sugar, dried pulp at 1.0 ppm; beet, sugar,

molasses at 1.0 ppm; and beet, sugar, refined sugar at 0.70 ppm.

VII. Objections and Hearing Requests

Under section 408(g) of the FFDCA, as amended by the FQPA, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. The EPA procedural regulations which govern the submission of objections and requests for hearings appear in 40 CFR part 178. Although the procedures in those regulations require some modification to reflect the amendments made to the FFDCA by the FQPA of 1996, EPA will continue to use those procedures, with appropriate adjustments, until the necessary modifications can be made. The new section 408(g) provides essentially the same process for persons to "object" to a regulation for an exemption from the requirement of a tolerance issued by EPA under new section 408(d), as was provided in the old FFDCA sections 408 and 409. However, the period for filing objections is now 60 days, rather than 30 days.

A. What Do I Need to Do to File an Objection or Request a Hearing?

You must file your objection or request a hearing on this regulation in accordance with the instructions provided in this unit and in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket control number OPP-301085 in the subject line on the first page of your submission. All requests must be in writing, and must be mailed or delivered to the Hearing Clerk on or before March 5, 2001.

1. *Filing the request.* Your objection must specify the specific provisions in the regulation that you object to, and the grounds for the objections (40 CFR 178.25). If a hearing is requested, the objections must include a statement of the factual issues(s) on which a hearing is requested, the requestor's contentions on such issues, and a summary of any evidence relied upon by the objector (40 CFR 178.27). Information submitted in connection with an objection or hearing request may be claimed confidential by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the information that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice.

Mail your written request to: Office of the Hearing Clerk (1900), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. You

may also deliver your request to the Office of the Hearing Clerk in Rm. C400, Waterside Mall, 401 M St., SW., Washington, DC 20460. The Office of the Hearing Clerk is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Office of the Hearing Clerk is (202) 260-4865.

2. *Tolerance fee payment.* If you file an objection or request a hearing, you must also pay the fee prescribed by 40 CFR 180.33(i) or request a waiver of that fee pursuant to 40 CFR 180.33(m). You must mail the fee to: EPA Headquarters Accounting Operations Branch, Office of Pesticide Programs, P.O. Box 360277M, Pittsburgh, PA 15251. Please identify the fee submission by labeling it "Tolerance Petition Fees."

EPA is authorized to waive any fee requirement "when in the judgement of the Administrator such a waiver or refund is equitable and not contrary to the purpose of this subsection." For additional information regarding the waiver of these fees, you may contact James Tompkins by phone at (703) 305-5697, by e-mail at tompkins.jim@epa.gov, or by mailing a request for information to Mr. Tompkins at Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

If you would like to request a waiver of the tolerance objection fees, you must mail your request for such a waiver to: James Hollins, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

3. *Copies for the Docket.* In addition to filing an objection or hearing request with the Hearing Clerk as described in Unit VII.A., you should also send a copy of your request to the PIRIB for its inclusion in the official record that is described in Unit I.B.2. Mail your copies, identified by the docket control number OPP-301085, to: Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. In person or by courier, bring a copy to the location of the PIRIB described in Unit I.B.2. You may also send an electronic copy of your request via e-mail to: opp-docket@epa.gov. Please use an ASCII file format and avoid the use of special characters and any form of encryption. Copies of electronic objections and hearing requests will also be accepted on disks in WordPerfect 6.1/8.0 file format or ASCII file format. Do not

include any CBI in your electronic copy. You may also submit an electronic copy of your request at many Federal Depository Libraries.

B. When Will the Agency Grant a Request for a Hearing?

A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: There is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established resolve one or more of such issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issues(s) in the manner sought by the requestor would be adequate to justify the action requested (40 CFR 178.32).

VIII. Regulatory Assessment Requirements

This final rule establishes time limited tolerances under FFDCA section 408. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, or impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104-4). Nor does it require any prior consultation as specified by Executive Order 13084, entitled *Consultation and Coordination with Indian Tribal Governments* (63 FR 27655, May 19, 1998); special considerations as required by Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994); or require OMB review or any Agency action under Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997). This action does not involve any technical standards that would require

Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note). Since tolerances and exemptions that are established on the basis of a FIFRA section 18 exemption under FFDCA section 408, such as the tolerances in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) do not apply. In addition, the Agency has determined that this action will not have a substantial direct effect on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, entitled *Federalism* (64 FR 43255, August 10, 1999). Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." This final rule directly regulates growers, food processors, food handlers and food retailers, not States. This action does not alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4).

IX. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the

Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of this final rule in the **Federal Register**. This final rule is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: December 19, 2000.

James Jones,

Director, Registration Division, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 321(q), 346(a) and 371.

2. Section 180.443 is amended by alphabetically adding commodities to the table in paragraph (b) to read as follows:

§ 180.443 Myclobutanil; tolerances for residues.

* * * * *

(b) * * *

Commodity	Parts per million	Expiration/revocation date
* * *	* * *	* * *
Beet, sugar, dried pulp	1.0	12/31/02
Beet, sugar, molasses	1.0	12/31/02
Beet, sugar, refined sugar	0.70	12/31/02
Beet, sugar, roots	0.05	12/31/02
Beet, sugar, tops	1.0	12/31/02
* * *	* * *	* * *

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[FR Doc. 01-26 Filed 1-2-01; 8:45 am]

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Proposed Rules

Federal Register

Vol. 66, No. 2

Wednesday, January 3, 2001

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

FEDERAL RESERVE SYSTEM

12 CFR Part 225

[Regulation Y; Docket No. R-1091]

Bank Holding Companies and Change in Bank Control

DEPARTMENT OF THE TREASURY

Office of the Under Secretary for Domestic Finance

12 CFR Part 1501

RIN 1505-AA84

Financial Subsidiaries

AGENCIES: Board of Governors of the Federal Reserve System and Department of the Treasury.

ACTION: Joint proposed rule with request for public comments.

SUMMARY: The Board of Governors of the Federal Reserve System and the Secretary of the Treasury jointly propose to seek comment on whether to determine by rule that real estate brokerage is an activity that is financial in nature or incidental to a financial activity and therefore permissible for financial holding companies and financial subsidiaries of national banks. The Board and the Secretary also jointly propose to solicit comment on whether real estate management activities could be considered financial in nature or incidental to a financial activity. The Board's proposed rule would amend subpart I of the Board's Regulation Y to add real estate brokerage and real estate management to the list of activities permissible for financial holding companies. The Secretary's proposed rule would amend its financial subsidiary regulations to add real estate brokerage and real estate management to the activities permissible for financial subsidiaries of national banks. The Board and the Secretary solicit comment on all aspects of the proposal.

DATES: Comments must be received by March 2, 2001.

ADDRESSES: Comments should refer to docket number R-1091 and should be mailed to Ms. Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, NW., Washington, DC 20551 (or mailed electronically to regs.comments@federalreserve.gov) and to Real Estate Brokerage and Management Regulation, Office of Financial Institution Policy, U.S. Department of the Treasury, 1500 Pennsylvania Avenue, NW., Room SC 37, Washington, DC 20220 (or mailed electronically to financial.institutions@do.treas.gov). Comments addressed to Ms. Johnson also may be delivered to the Board's mailroom between 8:45 a.m. and 5:15 p.m. and, outside those hours, to the Board's security control room. Both the mailroom and the security control room are accessible from the Eccles Building courtyard entrance, located on 20th Street between Constitution Avenue and C Street, N.W. Members of the public may inspect comments in room MP-500 of the Martin Building between 9 a.m. and 5 p.m. on weekdays. Comments addressed to the Treasury Department may also be delivered to the Treasury Department mail room between the hours of 8:45 a.m. and 5:15 p.m. at the 15th Street entrance to the Treasury Building.

FOR FURTHER INFORMATION CONTACT:

Board of Governors: Scott G. Alvarez, Associate General Counsel (202/452-3583), or Mark E. Van Der Weide, Counsel (202/452-2263), Legal Division; Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, NW., Washington, DC 20551. For users of Telecommunications Device for the Deaf ("TDD") only, contact Janice Simms at 202/872-4984.

Department of the Treasury: Gerry Hughes, Senior Financial Analyst (202/622-2740); Roberta K. McInerney, Assistant General Counsel (Banking and Finance) (202/622-0480); or Gary W. Sutton, Senior Banking Counsel (202/622-0480).

SUPPLEMENTARY INFORMATION:

Background

The Gramm-Leach-Bliley Act (Pub. L. 106-102, 113 Stat. 1338 (1999)) ("GLB Act") amended the Bank Holding Company Act (12 U.S.C. 1841 *et seq.*) ("BHC Act") to allow a bank holding

company or foreign bank that qualifies as a financial holding company ("FHC") to engage in a broad range of activities that are defined by the GLB Act to be financial in nature. The GLB Act also permits FHCs to engage in other activities that the Board determines, by regulation or order and in consultation with the Secretary of the Treasury ("Secretary"), to be financial in nature or incidental to a financial activity.

The GLB Act also amended the National Bank Act (12 U.S.C. 1 *et seq.*) to allow a national bank to invest in financial subsidiaries. Financial subsidiaries may engage, with certain exceptions, in the same broad range of activities that are defined by the GLB Act to be financial in nature and, therefore, permissible for FHCs.¹ In addition, the GLB Act permits financial subsidiaries to engage in other activities that the Secretary determines, in consultation with the Board, to be financial in nature or incidental to a financial activity.

The American Bankers Association ("ABA") and Fremont National Bank & Trust Company, Fremont, Nebraska, have asked the Board and the Secretary (collectively, the "Agencies") to determine that real estate brokerage and management activities are financial in nature. Two additional trade associations, the Financial Services Roundtable and the New York Clearing House Association, have requested that the Board permit FHCs to engage in real estate brokerage activities.² The National Association of Realtors ("NAR") has urged the Agencies not to determine that real estate brokerage activities are financial in nature or incidental to a financial activity.

The GLB Act directs the Board to consider a variety of factors when considering a request for a determination that an activity is financial in nature or incidental to a financial activity, including (i) the purposes of the BHC Act and the GLB

¹ The exceptions are engaging as principal in certain insurance underwriting activities, real estate investment and development (unless otherwise expressly authorized by law), and merchant banking activities permitted in 12 U.S.C. 1843(k)(4)(H) or (I). 12 U.S.C. 24a(a)(2)(B).

² The New York Clearing House Association submitted its request on behalf of The Bank of New York Company, Inc.; Chase Manhattan Corporation; Citigroup, Inc.; J.P. Morgan, Inc.; Bankers Trust Company; Fleet Boston, Inc.; HSBC; Bank One Corporation; First Union Corporation; and Wells Fargo & Company.

Act; (ii) the changes or reasonably expected changes in the marketplace in which FHCs compete; (iii) the changes or reasonably expected changes in the technology for delivering financial services; and (iv) whether the proposed activity is necessary or appropriate to allow a FHC to compete effectively with any company seeking to provide financial services in the United States, efficiently deliver financial information and services through the use of technological means, or offer customers any available or emerging technological means for using financial services or for the document imaging of data.³ The Secretary must consider a virtually identical set of factors in determining whether an activity is permissible for financial subsidiaries.⁴ The Agencies also may consider other factors and information that they consider relevant to their determination.

The Agencies believe that the GLB Act's "financial in nature or incidental" standard represents a significant expansion of the "closely related to banking" standard that the Board previously applied in determining the permissibility of activities for bank holding companies.⁵ In considering whether an activity was closely related to banking, the Board and the courts looked to whether banks generally (i) conduct the proposed activity, (ii) provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services, or (iii) provide services that are so integrally related to the proposed services as to require their provision in a specialized form.⁶ Because the new "financial in nature or incidental" test appears to be substantially broader than the old "closely related to banking" test, the Agencies believe that they should consider an activity to be financial in nature or incidental to a financial activity to the extent that it meets the old standard.

After considering the factors listed above and other relevant information, the Agencies propose to seek public comment on whether to adopt rules that would define real estate brokerage and real estate management as activities that

are financial in nature or incidental to a financial activity. The Board's proposed rule would amend § 225.86 of the Board's Regulation Y to add these two new activities to the list of activities permissible for FHCs. Bank holding companies and foreign banks that qualify as FHCs would be permitted to engage in real estate brokerage and real estate management by using the post-consummation notice procedure described in § 225.87 of Regulation Y. Bank holding companies and foreign banks that do not qualify as FHCs may engage only in those nonbanking activities that were permissible for bank holding companies prior to the enactment of the GLB Act and, thus, could not provide real estate brokerage or management services under the proposed rule. The Secretary's proposed rule would amend its regulations regarding financial subsidiaries to add real estate brokerage and real estate management to the activities permissible for financial subsidiaries. Qualifying national banks would be permitted to engage in these activities through financial subsidiaries by providing the Office of the Comptroller of the Currency ("OCC") with a notice under the OCC's rules.

The GLB Act requires that the Board and the Secretary consult with each other concerning any request, proposal, or application for a determination that an activity is financial in nature or incidental to a financial activity. The Agencies have consulted with each other concerning the proposed rules, and each Agency supports the other's determination to seek public comment on the proposed rules.⁷

Proposed Rules

A. Real Estate Brokerage

Real estate brokerage is the business of bringing together parties interested in consummating a real estate purchase, sale, exchange, lease, or rental transaction and negotiating on behalf of such parties a contract relating to the transaction. The activity of real estate brokerage would include acting as agent for a party to a real estate transaction; listing and advertising real estate; locating buyers, sellers, lessors, and lessees interested in engaging in real estate transactions among themselves; conveying information between the parties to a potential real estate transaction; providing advice in

connection with a real estate transaction; negotiating price and other terms on behalf of parties to a real estate transaction; and administering the closing to a real estate transaction. Real estate brokerage generally does not involve purchasing or selling real estate as principal. The business of real estate brokerage may only be conducted pursuant to state licensing laws and regulations.

As noted, prior to the passage of the GLB Act, bank holding companies were permitted to engage only in activities that the Board determined were closely related to banking under section 4(c)(8) of the BHC Act. In 1972, the Board determined that real estate brokerage was not closely related to banking for purposes of the BHC Act.⁸ Although the GLB Act does not explicitly authorize FHCs to act as real estate brokers, the statute permits FHCs to engage in any activity that the Board, in consultation with the Secretary, has determined to be financial in nature or incidental to a financial activity. As noted, the GLB Act's "financial in nature or incidental" test is broader than the former "closely related to banking" test.

Similarly, the OCC has not permitted national banks to engage in general real estate brokerage.⁹ Although the GLB Act does not explicitly authorize financial subsidiaries to act as real estate brokers, the statute permits financial subsidiaries to engage in any activity that the Secretary, in consultation with the Board, has determined to be financial in nature or incidental to a financial activity. For the reasons discussed below, the Agencies believe that they should seek public comment on whether real estate brokerage activities are financial in nature or incidental to a financial activity within the meaning of section 4(k)(1)(A) of the BHC Act and section 5136(a)(2)(A)(i) of the Revised Statutes.

1. General "Financial in Nature or Incidental" Analysis

Some depository institutions already engage in real estate brokerage. Although, as noted, the OCC has not permitted national banks to provide

⁸ 12 CFR 225.126(c); *Boatmen's Bancshares, Inc.*, 58 Federal Reserve Bulletin 427, 428 (1972). In 1987, as part of a proposal to authorize bank holding companies to engage in real estate investment (the "1987 Proposal"), the Board proposed permitting a bank holding company to provide real estate brokerage services in connection with real estate in which the bank holding company had an interest. See 52 FR 543 (Nov. 4, 1987); see also 50 FR 4519 (Jan. 31, 1985). The Board never adopted this proposed rule in final form.

⁹ See OCC Interpretive Letter No. 84, reprinted in [1978-1979 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,159 (Apr. 3, 1979).

³ See 12 U.S.C. 1843(k)(3).

⁴ See 12 U.S.C. 24a(b)(2).

⁵ See H.R. Conf. Rep. No. 106-434, at 153 (1999) ("permitting banks to affiliate with firms engaged in financial activities represents a significant expansion from the current requirement that bank affiliates may only be engaged in activities that are closely related to banking").

⁶ See *National Courier Association v. Board of Governors of the Federal Reserve System*, 516 F.2d 1229, 1237 (D.C. Cir. 1975).

⁷ Under the GLB Act, neither Agency may determine that an activity is financial in nature or incidental to a financial activity if the other Agency indicates in writing that it believes that the activity is not financial in nature, incidental to a financial activity, or otherwise permissible. 12 U.S.C. 1843(k)(2)(A)(ii), 24a(b)(1)(B)(i)(II).

general real estate brokerage services, several states currently permit their state-chartered banks to act as a general real estate broker.¹⁰ The Office of Thrift Supervision ("OTS") also has permitted the service corporation subsidiaries of federal savings associations to provide general real estate brokerage services.¹¹ In addition, national and state bank trust departments have long been involved as agent in the purchase and sale of real estate assets that are part of trust estates.

Although bank holding companies and financial subsidiaries do not have authority to provide real estate brokerage services, banks and bank holding companies engage in a wide variety of other real-estate related activities, including (i) holding bank premises and acquiring real estate in a fiduciary capacity or in full or partial satisfaction of a debt previously contracted; (ii) making real estate investments that have as their primary purpose community development (subject to certain limits); (iii) providing real estate appraisal services; (iv) arranging commercial real estate equity financing; (v) real estate lending; (vi) real estate leasing; (vii) providing real estate settlement and escrow services; and (viii) providing real estate investment advisory services.¹² Since the passage of the GLB Act, FHCs and financial subsidiaries also have been able to provide title insurance, private mortgage insurance, and any other type of insurance to the parties to a real estate transaction.¹³ As a result, banks

and bank holding companies participate in most aspects of the typical real estate transaction other than brokerage.

In addition, banks and bank holding companies currently engage in a variety of activities that are functionally and operationally similar to real estate brokerage. Banking organizations have provided their customers with various agency transactional services, including securities brokerage services, private placement services, futures commission merchant services, agency transactional services relating to swaps and other derivative instruments, and insurance agency services.¹⁴ Although these agency services are provided by banking organizations in connection with an underlying financial transaction (the purchase of securities, derivatives, or insurance), the agency services provided by a real estate broker are similar in nature to those provided by a securities, derivatives, or insurance broker.

Although the full range of real estate brokerage services would not fit within the scope of national bank or FHC finder authority,¹⁵ many of the essential aspects of real estate brokerage are already permissible finder activities. The OCC's regulations provide that "a national bank may act as a finder in bringing together a buyer and a seller" for a financial or nonfinancial transaction and further provide that permissible finder activities include "identifying potential parties, making inquiries as to interest, introducing or arranging meetings of interested parties, and otherwise bringing parties together for a transaction that the parties themselves negotiate and consummate."¹⁶ Pursuant to the finder and financial counseling authorities, the OCC has permitted national banks to locate, analyze, and make recommendations regarding the

purchase or sale of real estate; and to place real estate investment properties by contacting a limited number of qualified investors, identifying and engaging real estate brokers, advising investors regarding the terms of a real estate sale, and administering a real estate closing.¹⁷ A final rule issued by the Board on December 13, 2000, authorized FHCs to act as a finder.¹⁸

In addition, the authority of national banks and bank holding companies to assist third parties in obtaining commercial real estate equity financing includes an important subset, although not the full panoply, of services provided by the typical real estate broker.¹⁹ In this regard, the Board has allowed bank holding companies to act as an intermediary for the financing of commercial or industrial income-producing real estate by arranging for the transfer of the title, control, and risk of such a real estate project to one or more investors. Bank holding companies may only arrange commercial real estate equity financing with respect to real estate projects that are not sponsored by or invested in by the holding company. The OCC similarly has authorized national banks to arrange for the placement of equity interests in commercial and investment real estate.²⁰

In determining whether an activity is financial in nature or incidental to a financial activity, the GLB Act specifically instructs the Board and the Secretary to consider whether the activity is necessary or appropriate to allow a FHC or a bank, respectively, to compete effectively with other financial services companies operating in the United States.²¹ Before the passage of the GLB Act, in determining whether an activity was "closely related to banking," the law directed the Board to consider whether banks engaged in the activity, but did not explicitly authorize the Board to consider whether other financial service providers engaged in the activity.²² This change in law represents a significant expansion of the

¹⁰ See, e.g., Iowa Code § 524.802 ("A state bank shall have * * * the power to * * * engage in the brokerage of insurance and real estate subject to the prior approval of the superintendent."); N.J. Admin. Code tit. 3, § 11-11.5(a)(4) (permitting a subsidiary of a New Jersey state-chartered bank to provide real estate brokerage services); 1979 Ky. AG LEXIS 224 ("A state bank, through its authorized trust department, and state trust companies may act as real estate brokers or salesmen in the general real estate business, regardless of whether it involves the institution's fiducial business or not.").

¹¹ See 12 CFR 559.4(e)(4) and OTS Letter, July 16, 1997 (1997 OTS LEXIS 3).

¹² With respect to bank holding companies, see, e.g., 12 CFR 225.22(d)(1) and (3) and 225.28(b)(2), (3), and (12). With respect to national banks, see, e.g., 12 U.S.C. 29 (holding bank premises and acquiring real estate (DPC)); 12 U.S.C. 92a (general fiduciary authority); OCC Interpretive Letter No. 467, *reprinted in* [1988-1989 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,691 (Jan. 24, 1989) (providing real estate appraisal services); OCC Interpretive Letter No. 387, *reprinted in* [1988-1989 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,611 (June 22, 1987) (arranging commercial real estate equity financing); 12 U.S.C. 371 (real estate lending); 12 CFR 5.34(e)(5)(v) (providing real estate settlement and escrow services and real estate investment advisory services).

¹³ See 12 U.S.C. 1843(k)(4)(B), 24a(b)(1)(A)(i). The authority of a financial subsidiary to underwrite certain types of insurance is, however, limited. See 12 U.S.C. 24a(a)(2)(B)(i).

¹⁴ With respect to bank holding companies, see, e.g., 12 CFR 225.28(b)(7) and 12 U.S.C. 1843(k)(4)(B). With respect to national banks, see, e.g., 12 U.S.C. 24(7) (securities brokerage services); OCC Interpretive Letter No. 329, *reprinted in* [1985-1987 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,499 (Mar. 4, 1985) (private placement services); 12 CFR 5.34(e)(5)(v) (futures commission merchant services and agency transactional services relating to swaps and derivatives); and 12 U.S.C. 92 (insurance agency services).

¹⁵ Real estate brokerage would not fit within the finder activities permitted to national banks because real estate brokerage essentially involves the real estate broker in negotiation of the real estate transaction—a role specifically forbidden to national bank finders. See 12 CFR 7.1002(b). Real estate brokerage would not fit within the finder activities authorized for FHCs because the Board's finder rule prohibits a finder from becoming involved in negotiation and specifically excludes any activity that would require the FHC to register or obtain a license as a real estate agent or broker. See Board press release (December 13, 2000).

¹⁶ 12 CFR 7.1002.

¹⁷ See OCC Interpretive Letter No. 238, *reprinted in* [1983-1984 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,402 (Feb. 9, 1982). The OCC also has allowed national banks to participate in the structuring and negotiation of certain real estate exchange transactions. See OCC Interpretive Letter No. 880, *reprinted in* [1999-2000 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 81,373 (Dec. 6, 1999).

¹⁸ See Board press release (December 13, 2000).

¹⁹ See, e.g., 12 CFR 225.28(b)(2)(ii).

²⁰ See OCC Interpretive Letter No. 271, *reprinted in* [1983-1984 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,435 (Sept. 21, 1983).

²¹ 12 U.S.C. 1843(k)(3)(D)(i), 24a(b)(2)(D)(i).

²² See *National Courier Association v. Board of Governors of the Federal Reserve System*, 516 F.2d 1229, 1237 (D.C. Cir. 1975).

Board's capacity to consider the competitive realities of the U.S. financial marketplace in determining the permissibility of activities for FHCs.

As the financial marketplace continues to evolve, it appears that many financial companies are adding real estate brokerage to their menu of services. In this regard, the ABA has provided evidence that several diversified financial companies provide real estate brokerage services in addition to their more traditional banking, securities, and insurance services.²³ The ABA also has asserted that buyers and sellers of real estate are increasingly looking to a single company to provide all of their real estate-related needs. Purchasers of real estate seem especially interested in obtaining real estate brokerage and mortgage finance from a single provider. The ABA argues that permitting FHCs and financial subsidiaries to engage in real estate brokerage activities would permit FHCs and banks to compete effectively with other financial service providers in the United States. The Agencies solicit comment on the extent to which U.S. financial services companies provide real estate brokerage services.

Existing federal and state laws should operate to mitigate the potential adverse effects of combining banking and real estate brokerage. The antitying rules should help prevent banks from using any market power they possess to assist an affiliated financial subsidiary or FHC in monopolizing or competing unfairly in the real estate brokerage business. The antitying rules would prohibit a subsidiary bank of a FHC engaged in real estate brokerage or the parent bank of a financial subsidiary engaged in real estate brokerage from extending credit, furnishing any service, or varying the consideration for any loan or service on the condition that the customer obtain real estate brokerage services from the bank or any affiliate (including a financial subsidiary) of the bank.²⁴ Sections 23A and 23B of the Federal Reserve Act would limit the amount of credit and certain other forms of support that a bank could provide to a real estate brokerage affiliate (including a financial subsidiary).²⁵ In addition, section 23B would require mortgage loans by a bank

to a customer who obtains real estate brokerage services from a bank affiliate (including a financial subsidiary) to be on market terms.²⁶ Furthermore, federal and state consumer protection laws, including the Real Estate Settlement Procedures Act,²⁷ would help protect customers of banks and affiliated real estate brokers. The Agencies solicit comment on the potential adverse effects of allowing FHCs or financial subsidiaries to act as a real estate broker and whether special restrictions on transactions or relationships between a real estate broker and its affiliated depository institutions are necessary to mitigate those adverse effects.²⁸

Permitting FHCs and financial subsidiaries to engage in real estate brokerage does not appear to present significant risks to those organizations or their depository institution affiliates. The proposed rules would ensure that the authorized real estate brokerage services are agency services only and that FHCs and financial subsidiaries take no principal risk in connection with real estate transactions that they broker. As a consequence, FHCs and financial subsidiaries engaging in real estate brokerage would not be subject to either the liquidity risk or market risk associated with real estate investment and development. Real estate brokerage involves operational and legal risks, but these risks appear similar in nature and extent to those posed by other agency activities conducted by FHCs and financial subsidiaries.

2. Real Estate Brokerage as a Statutorily Listed Financial Activity

The ABA has argued that real estate is a financial asset and that, accordingly, the Agencies should find real estate brokerage to be part of the statutorily listed financial activity of "[l]ending, exchanging, transferring, investing for others or safeguarding financial assets

other than money or securities."²⁹ According to the ABA, real estate is a financial asset because (i) the home is the largest asset for many individuals; (ii) real estate serves as the underpinning for hundreds of billions of dollars of mortgage-backed securities; and (iii) real estate serves as a means of wealth creation by increasing in value over time and providing tax benefits.

The Agencies are not convinced that real estate should be deemed a financial asset because it is a comparatively large asset on most individuals' personal balance sheet or because it often is used as collateral for financial instruments. Airplanes, boats, and automobiles are large assets that are often used as collateral for financial instruments (loans and leases in particular), yet these assets are generally considered to be nonfinancial. The Agencies recognize, however, that real estate does have certain important attributes of a financial asset; namely, that individuals often purchase real estate, at least in part, for investment purposes and with a view toward the financial benefits of the transaction.

These financial attributes of real estate may, however, not be enough to justify treating real estate as a financial asset. Although real estate often is purchased, in part, for investment purposes, the same can be said of many nonfinancial assets such as fine art, rare stamps, and antique cars. Moreover, whereas loans, securities, and most other financial assets are held for investment purposes only, most purchasers and renters of real estate also use the property as a residence or in the operation of a business. Finally, financial assets are generally thought to include money, loans, securities, and other similar intangible properties. Real estate, on the other hand, is a tangible, physical asset.

The ABA also has argued that the purchase, sale, or lease of real estate is a financial transaction and that, accordingly, the Agencies should find that real estate brokerage is part of the listed financial activity of "[a]rranging, effecting, or facilitating financial transactions for the account of third parties."³⁰ The ABA contends that the purchase, sale, or lease of real estate is a financial transaction because it is the most important, complex, and financially difficult transaction that

²³ For example, General Motors Acceptance Corporation operates a thrift, makes mortgage loans, and provides real estate brokerage services; Prudential Insurance Company provides insurance and securities products and real estate brokerage services; Cendant Corporation provides insurance, mortgage loans, and real estate brokerage services; and Long & Foster provides mortgage loans, insurance products, and real estate brokerage services.

²⁴ 12 U.S.C. 1972(1)(B).

²⁵ 12 U.S.C. 371c and 371c-1.

²⁶ 12 U.S.C. 371c-1(a)(2)(D). Section 23A also would cover mortgage loans by a bank to a customer to the extent that the customer uses part of the loan proceeds to pay the brokerage commission of a real estate brokerage affiliate of the bank.

²⁷ 12 U.S.C. 2601 *et seq.*

²⁸ Under section 114 of the GLB Act, the Board has authority to impose restrictions or requirements on transactions or relationships between a depository institution subsidiary of a bank holding company and any affiliate of such depository institution, if the Board finds that such action would be (i) consistent with the purposes of applicable Federal law and (ii) appropriate, among other things, to avoid adverse effects such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices. GLB Act Section 114(b). Section 114 provides the OCC with similar authority to impose restrictions or requirements on transactions or relationships between a national bank and its subsidiaries. GLB Act Section 114(a).

²⁹ 12 U.S.C. 1843(k)(5)(B)(i), 24a(b)(3)(A). The GLB Act requires the Agencies jointly to define this activity and two other listed activities as "financial in nature" and to determine "the extent to which such activities are financial in nature or incidental to a financial activity." 12 U.S.C. 1843(k)(5)(A), 24a(b)(3).

³⁰ 12 U.S.C. 1843(k)(5)(B)(iii), 24a(b)(3)(C).

most individuals undertake. The Agencies are not convinced that the importance, complexity, or size of a transaction should affect a determination as to whether the transaction is financial in nature. On the other hand, real estate transactions often are entered into, at least in part, for investment purposes. To that extent, real estate transactions do have some aspects of a financial transaction. The Agencies seek comment on the above issues.

3. Arguments of the NAR

As noted, the NAR has asked that the Agencies not authorize real estate brokerage activities. The NAR makes four principal contentions in support of its position. First, the NAR notes that the GLB Act does not specifically authorize FHCs to engage in real estate brokerage. Although this contention is true, the GLB Act also authorizes each Agency to supplement the statutory activities list with additional activities that it determines, in consultation with the other Agency, to be financial in nature or incidental to a financial activity. The NAR points out that the GLB Act specifically prohibits financial subsidiaries from engaging in real estate investment and development activities, but this prohibition by its terms does not apply to FHCs or to real estate brokerage activities.

Second, the NAR suggests that it would be inappropriate for the Board now to permit FHCs to provide real estate brokerage services because the Board prohibited bank holding companies from acting as a real estate broker in 1972. As noted above, the Board's 1972 decision on real estate brokerage was made pursuant to the former "closely related to banking" standard; the GLB Act now authorizes the Board to approve any activity that is "financial in nature" or "incidental to a financial activity." The plain meaning of and legislative history behind the "financial" and "incidental to financial" standards suggest that Congress intended the new standards to be significantly broader than the old "closely related to banking" test. Furthermore, the financial services environment has changed significantly in the past 30 years, and what may have been an inappropriate activity for bank holding companies in the early 1970s may be appropriate for the diversified FHCs of the early 21st century.

Third, the NAR claims that real estate brokerage is a commercial activity and not a financial activity. Finally, the NAR argues that the Agencies should delay finding real estate brokerage to be a permissible activity until such time as

FHCs gain experience in conducting the various other new activities authorized by the GLB Act.

The Agencies seek comment on whether real estate brokerage is an activity that is financial in nature or incidental to a financial activity. In addition, the Agencies seek comment on the particular arguments advanced by the NAR.

B. Real Estate Management Services

Real estate management is the business of providing for others day-to-day management of real estate. Day-to-day management of real estate could include procuring tenants; negotiating leases; maintaining security deposits; billing and collecting rent payments; providing periodic accountings for such payments; making principal, interest, insurance, tax, and utilities payments; and generally overseeing inspection, maintenance, and upkeep of real property. Real estate management generally does not involve purchasing, selling, or owning real estate as principal. Although some states do not subject real estate managers to special licensing laws or regulations, real estate managers in other states are subject to the same state licensing laws and regulations that apply to real estate brokers.

The Board first proposed allowing bank holding companies to provide property management services in 1971.³¹ For a variety of reasons, however, including the substantial volume of negative public comment received on the proposal, the Board determined in 1972 that property management was not closely related to banking for purposes of the BHC Act.³² Similarly, the OCC has not permitted national banks to engage in general real estate management.³³

The Agencies have some doubts as to whether all aspects of real estate management are financial in nature or incidental to a financial activity. The Agencies also are concerned that certain forms of real estate management appear to resemble more closely day-to-day operation of a commercial enterprise than serving as the intermediary between the owners and users of real estate. Nevertheless, for the reasons discussed below, the Agencies believe

that they should seek public comment on (i) what activities are included within real estate management and (ii) which of these activities, if any, are financial in nature or incidental to a financial activity within the meaning of section 4(k)(1)(A) of the BHC Act and section 5136A(a)(2)(A)(i) of the Revised Statutes.

1. General "Financial in Nature or Incidental" Analysis

Neither the OCC nor state banking departments, to the Agencies' knowledge, have permitted banks to provide general real estate management services. Thrift holding companies (including non-unitary thrift holding companies) and thrift service corporation subsidiaries, however, have been permitted to maintain and manage real estate.³⁴ In addition, as noted above, banking organizations have long been engaged in a variety of real estate-related activities. Moreover, some (though not all) real estate management activities appear to be functionally and operationally similar to various other activities that banks and bank holding companies currently engage in. For example, collecting rental payments; maintaining security deposits; making principal, interest, taxes, and insurance payments; and providing periodic accountings are functionally similar to collecting loan or lease payments, disbursing escrow payments, and performing related accountings. In addition, banks and bank holding companies have a long history of managing real estate assets that are part of trust estates, that are used by the banking organization in its own operations, or that are acquired as a result of foreclosure.³⁵

As noted above, in determining whether an activity is financial in nature or incidental to a financial activity, the GLB Act instructs the Board and the Secretary to consider whether the activity is necessary or appropriate to allow FHCs or banks, respectively, to compete effectively with other financial services companies operating in the United States. The ABA has contended that competitive considerations support a determination to allow FHCs and financial subsidiaries to provide real estate management services. The Agencies solicit comment on the extent to which financial services companies

³¹ See 36 FR 18427 (Sept. 7, 1971).

³² 12 CFR 225.126(g); 58 Federal Reserve Bulletin 652 (1972). As part of the 1987 Proposal, the Board proposed authorizing a bank holding company to provide real estate management services in connection with real estate in which the bank holding company had an interest. See 52 FR 543 (Nov. 4, 1987); see also 50 FR 4519 (Jan. 31, 1985). As noted above, the Board never finalized this proposed rule.

³³ See OCC Interpretive Letter No. 238, *supra*.

³⁴ See 12 CFR 559.4(e)(3), 584.2-1(b)(8).

³⁵ See, e.g., OCC Interpretive Letter No. 238, *supra*; OCC Interpretive Letter No. 355, *reprinted in* [1985-1987 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 85,525 (Dec. 10, 1985); *Bancorp Hawaii, Inc.*, 71 Federal Reserve Bulletin 168, 168 n.2 (1985); *United Missouri Bancshares, Inc.*, 64 Federal Reserve Bulletin 415, 417 (1978).

provide real estate management services in the United States and on whether permitting FHCs and financial subsidiaries to provide real estate management services would help ensure competitive equity between FHCs and financial subsidiaries and other financial firms.

The same laws that would operate to mitigate potential adverse effects in the real estate brokerage context also would help to alleviate adverse effects in the provision of real estate management services. The Agencies solicit comment on the potential adverse effects of allowing FHCs and financial subsidiaries to act as a real estate manager and whether special restrictions are necessary to mitigate those adverse effects.

Permitting FHCs and financial subsidiaries to engage in real estate management activities does not appear to present significant risks to those organizations or their depository institution affiliates. The proposed rules would ensure that the authorized real estate management services are agency services only and that FHCs and financial subsidiaries take no principal risk in connection with real estate that they manage. The Agencies recognize, however, that engaging in property management may increase the operational, legal, and reputational risks faced by a FHC or financial subsidiary. Accordingly, the Agencies seek comment on the nature and extent of these risks.

2. Real Estate Management as a Statutorily Listed Financial Activity

The ABA has argued that the Agencies should find that real estate management is part of the listed financial activity of “[l]ending, exchanging, transferring, investing for others or safeguarding financial assets other than money or securities.”³⁶ If the Agencies were to conclude that real estate is a financial asset, this argument would have some textual appeal. Real estate management could be viewed, in part, as a form of safeguarding real estate.

The ABA also has argued that the Agencies should find that real estate management services are part of the listed financial activity of “[a]rranging, effecting, or facilitating financial transactions for the account of third parties.”³⁷ Part of the role of a property manager does involve the facilitation of financial transactions: For example, maintenance of security deposits, collection of rent payments, and

distribution of principal, interest, insurance, tax, and utility payments. Property management also, however, appears to have components that go beyond the facilitation of financial transactions. The Agencies seek comment on the above issues.

C. Description of the Proposed Rules

1. Real Estate Brokerage

The proposed rules authorize FHCs and financial subsidiaries to provide real estate brokerage services and include examples of the sorts of activities that the Agencies consider to be included within real estate brokerage. The Agencies seek comment on whether any final rules should provide further guidance regarding the scope of activities that are included within real estate brokerage.

Importantly, the proposed rules also contain restrictions designed to ensure that a FHC or financial subsidiary, when acting as a real estate broker, serves only as an intermediary between buyers and sellers (or lessees and lessors) and does not otherwise become impermissibly involved in the underlying real estate transaction. In particular, the proposed rules make clear that they do not authorize a FHC or financial subsidiary to (i) invest in or develop real estate; or (ii) take title to, acquire, or hold an ownership interest in any real estate that is the subject of the company's real estate brokerage services.

The Agencies understand that many real estate brokers offer employee relocation services to their corporate clients. Certain fundamental employee relocation services—assisting a client's transferred employees to sell their existing homes, buy homes in their destination locations, and obtain mortgage financing for their new home purchases—appear to be forms of real estate brokerage or currently permissible financial activities.

Other employee relocation activities seem less obviously a part of real estate brokerage or otherwise financial in nature. For example, a real estate broker providing employee relocation services often commits to purchase any home owned by one of its client's transferred employees at a fixed price if the broker fails to sell the home within a certain time period. The Agencies believe that such services may be incidental to real estate brokerage if the homes purchased by the broker are sold within a short time period, the broker's total holdings of unsold real estate do not exceed some threshold amount, and the broker only purchases unsold real estate in connection with providing bona fide employee relocation services to

customers (not for the purpose of speculating on the price of real estate). The Agencies also understand that employee relocation services often include assisting transferred employees to move household goods to their destination locations and assisting the spouses of transferred employees to find employment in their destination locations.

The Agencies request information on the kinds of employee relocation services that real estate brokers currently provide. The Agencies also seek comment on whether to permit FHCs or financial subsidiaries: (i) To provide employee relocation services as part of real estate brokerage or otherwise; (ii) to purchase residential real estate in connection with providing employee relocation services and, if so, what conditions or limits should apply to such real estate purchases; and (iii) to assist transferred employees to move their household goods and to assist the spouses of transferred employees to find employment in connection with providing employee relocation services.

2. Real Estate Management

The proposed rules authorize FHCs and financial subsidiaries to provide real estate management services and include examples of the sorts of activities that the Agencies consider to be included within real estate management.

The ABA has suggested that the Agencies' definition of real estate management should include any activities that may be defined as “real estate management” under any state law. The Agencies generally are reluctant to delegate to state legislatures any determinations regarding the scope of permissible activities for federally regulated banking organizations. Nevertheless, the Agencies specifically solicit comment on whether real estate management activities should be defined explicitly to include any activities that are defined as “real estate management” under state law. The Agencies also request comment more generally on whether any final rules should contain further guidance regarding the scope of activities that are included within real estate management.

The proposed rules contain restrictions designed to ensure that a FHC or financial subsidiary, when providing real estate management services, acts only in an agency capacity as an intermediary between the owners and users of real estate. In particular, the proposed rules make clear that real estate management does not include (i) investing in or developing real estate; or

³⁶ 12 U.S.C. 1843(k)(5)(B)(i), 24a(b)(3)(A).

³⁷ 12 U.S.C. 1843(k)(5)(B)(iii), 24a(b)(3)(C).

(ii) taking title to, acquiring, or holding an ownership interest in any real estate that the FHC or financial subsidiary manages. In light of these exclusions, the Agencies request comment on whether real estate managers receive compensation in the form of an equity or equity-like interest in the managed real estate and, if so, whether the Agencies should prevent FHCs that engage in real estate management from receiving compensation in this form.

The proposed rules also prevent a FHC or financial subsidiary that provides real estate management services from itself repairing or maintaining the managed real estate. The Agencies have doubts as to whether repair and maintenance of real estate are activities that are financial in nature or incidental to a financial activity. The proposed rules allow a FHC or financial subsidiary, however, to arrange for a third party to provide these services. The Agencies request comment on whether FHCs and financial subsidiaries should be limited in their authority to engage in any other aspects of real estate management.

The Agencies also seek comment on whether they should draw any distinctions between the management of single-family housing, multi-family housing, office buildings, institutional buildings (hotels, hospitals, etc.), commercial and industrial properties, and farms. In addition, the Agencies solicit comment on whether real estate management should include management of the air rights above and the oil and mineral rights beneath particular parcels of land. As noted above, the Agencies are concerned that certain forms of real estate management may more closely resemble day-to-day operation of a commercial enterprise than serving as the intermediary between the owners and users of real estate.

Plain Language

Section 722 of the GLB Act requires the Board to use "plain language" in all proposed and final rules published after January 1, 2000. In light of this requirement, the Board has sought to present its proposed rule in a simple and straightforward manner and has included in the rule examples of activities that would be permissible under the proposed rule. The Board invites comments on whether there are additional steps the Board could take to make the proposed rule easier to understand.

Regulatory Flexibility Act

Pursuant to section 605(b) of the Regulatory Flexibility Act, the Agencies

certify that the proposed rules would not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The proposed rules would remove regulatory restrictions on financial holding companies and financial subsidiaries of national banks by permitting them to engage in real estate brokerage and real estate management activities. The proposed rules would apply to all financial holding companies and national bank financial subsidiaries, regardless of their size. The proposed rules should enhance the ability of financial holding companies and financial subsidiaries, including small financial holding companies and financial subsidiaries, to compete with other providers of financial services in the United States and to respond to technological and other changes in the marketplace in which they compete. Accordingly, a regulatory flexibility analysis is not required.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3506; 5 CFR part 1320 Appendix A.1), the Board has reviewed the proposed rule under the authority delegated to the Board by the Office of Management and Budget. No collections of information pursuant to the Paperwork Reduction Act are contained in the proposed rule.

List of Subjects

12 CFR Part 225

Administrative practice and procedures, Banks, Banking, Federal Reserve System, Holding companies, Reporting and recordkeeping requirements, Securities.

12 CFR Part 1501

Administrative practice and procedure, National Banks, Reporting and recordkeeping requirements.

Federal Reserve System

12 CFR Chapter II

Authority and Issuance

For the reasons set forth in the joint preamble, part 225 of chapter II, title 12 of the Code of Federal Regulations is proposed to be amended as follows:

PART 225—BANK HOLDING COMPANIES AND CHANGE IN BANK CONTROL (REGULATION Y)

1. The authority citation for part 225 continues to read as follows:

Authority: 12 U.S.C. 1817(j)(13), 1818, 1828(o), 1831i, 1831p-1, 1843(c)(8), 1843(k),

1844(b), 1972(l), 3106, 3108, 3310, 3331-3351, 3907, and 3909.

2. Section 225.86(d), published at 65 FR 80740, December 22, 2000, is amended by adding new paragraphs (d)(2) and (d)(3) to read as follows:

§ 225.86 What activities are permissible for financial holding companies?

* * * * *

(d) * * *

(2) *Real estate brokerage.*

(i) Providing real estate brokerage services, including, among other things, acting as an agent for a buyer, seller, lessor, or lessee of real estate; listing and advertising real estate; providing advice in connection with a real estate purchase, sale, exchange, lease, or rental transaction; bringing together parties interested in consummating such a real estate transaction; and negotiating on behalf of such parties a contract relating to such a real estate transaction.

(ii) In providing real estate brokerage services, a financial holding company may not:

(A) Invest in or develop real estate as principal; or

(B) Take title to, acquire, or hold any ownership interest in real estate brokered by the company.

(3) *Real estate management.*

(i) Providing real estate management services, including, among other things, procuring tenants; negotiating leases; maintaining security deposits; billing and collecting rent payments; providing periodic accountings for such payments; making principal, interest, insurance, tax, and utility payments; and generally overseeing the inspection, maintenance, and upkeep of real estate.

(ii) In providing real estate management services, a financial holding company may not:

(A) Invest in or develop real estate as principal;

(B) Take title to, acquire, or hold any ownership interest in real estate managed by the company; or

(C) Directly or indirectly maintain or repair real estate managed by the company (but may arrange for a third party to provide these services).

By order of the Board of Governors of the Federal Reserve System, December 26, 2000.

Jennifer J. Johnson,
Secretary of the Board.

Department of the Treasury

12 CFR Chapter XV

Authority and Issuance

For the reasons set forth in the joint preamble, part 1501 of chapter XV, title 12 of the Code of Federal Regulations is proposed to be amended as follows:

PART 1501—FINANCIAL SUBSIDIARIES

1. The authority citation for part 1501 continues to read as follows:

Authority: 12 U.S.C. 24a.

2. Section 1501.2, published in an interim rule in this issue of the **Federal Register**, is amended by adding new paragraphs (b) and (c) to read as follows:

1501.2 What activities has the Secretary determined to be financial in nature or incidental to a financial activity?

(a) * * *

(b) *Real estate brokerage.*

(1) Providing real estate brokerage services, including, among other things, acting as an agent for a buyer, seller, lessor, or lessee of real estate; listing and advertising real estate; providing advice in connection with a real estate purchase, sale, exchange, lease, or rental transaction; bringing together parties interested in consummating such a real estate transaction; and negotiating on behalf of such parties a contract relating to such a real estate transaction.

(2) In providing real estate brokerage services, a financial subsidiary may not:

(i) Invest in or develop real estate as principal; or

(ii) Take title to, acquire, or hold any ownership interest in real estate brokered by the financial subsidiary.

(c) *Real estate management.*

(1) Providing real estate management services, including, among other things, procuring tenants; negotiating leases; maintaining security deposits; billing and collecting rent payments; providing periodic accountings for such payments; making principal, interest, insurance, tax, and utility payments; and generally overseeing the inspection, maintenance, and upkeep of real estate.

(2) In providing real estate management services, a financial subsidiary may not:

(i) Invest in or develop real estate as principal;

(ii) Take title to, acquire, or hold any ownership interest in real estate managed by the financial subsidiary; or

(iii) Directly or indirectly maintain or repair real estate managed by the financial subsidiary (but may arrange for a third party to provide these services).

Dated: December 26, 2000.

Gregory A. Baer,

*Assistant Secretary for Financial Institutions,
Department of the Treasury.*

[FR Doc. 01-43 Filed 1-2-01; 8:45 am]

BILLING CODE 6210-01-P

RAILROAD RETIREMENT BOARD

20 CFR Part 369

RIN 3220-AB49

Use of the Seal of the Railroad Retirement Board

AGENCY: Railroad Retirement Board.

ACTION: Proposed rule.

SUMMARY: The Railroad Retirement Board (Board) proposes to amend its regulations to add a part explaining when use of the Board's seal is permitted. Federal law prohibits the use of an agency seal except as authorized by regulation. The Board currently has no such regulation.

DATE: Comments should be submitted on or before March 5, 2001.

ADDRESSES: Any comments should be submitted to the Secretary to the Board, Railroad Retirement Board, 844 North Rush Street, Chicago, IL 60611.

FOR FURTHER INFORMATION CONTACT: Marguerite P. Dabado, Assistant General Counsel, Railroad Retirement Board, (312) 751-4945, TDD (312) 751-4701.

SUPPLEMENTARY INFORMATION: The Railroad Retirement Board is an independent agency in the executive branch of the United States Government which is charged with the administration of the Railroad Retirement Act (45 U.S.C. 231 *et seq.*) and the Railroad Unemployment Insurance Act (45 U.S.C. 351 *et seq.*). Use of agency seals is governed by 18 U.S.C. 701 which prohibits the use of agency seals except as authorized under regulations made pursuant to law. This proscription is intended to protect the public against the use of a recognizable assertion of authority with intent to deceive (*U.S. v. Goeltz*, 513 F.2d 193 (C.A. Utah 1975), *cert. den.* 423 U.S. 830). The regulations of the Railroad Retirement Board do not include provisions for the authorization of use of the Agency's seal. The Board proposes to add Part 369 to its regulations to explain when use of the Board's seal is permitted.

In order to comply with the President's June 1, 1998, memorandum directing the use of plain language for all proposed and final rulemaking, the regulatory paragraphs introduced by the above rule changes have been written in plain language.

This rule concerns agency management and is not a regulation as defined in Executive Order 12866. Therefore, no regulatory impact analysis is required. There are no information collections associated with this rule.

List of Subjects in 20 CFR Part 369

Railroad retirement, Seals and insignia.

For the reasons set out in the preamble, the Railroad Retirement Board proposes to add part 369 to title 20, chapter II of the Code of the Federal Regulations to read as follows:

PART 369—USE OF THE SEAL OF THE RAILROAD RETIREMENT BOARD

Sec.

369.1 Unofficial use of the seal of the Railroad Retirement Board.

369.2 Authority to grant written permission for use of the seal.

369.3 Procedures for obtaining permission to use the seal.

369.4 Inappropriate use of the seal.

369.5 Penalty for misuse of the seal.

Authority: 18 U.S.C. 701; 45 U.S.C. 231f.

§ 369.1 Unofficial use of the seal of the Railroad Retirement Board.

Use of the seal of the Railroad Retirement Board for non-agency business is prohibited unless permission for use of the seal has been obtained in accordance with this part.

§ 369.2 Authority to grant written permission for use of the seal.

The Board hereby delegates authority to grant written permission for the use of the seal of the Railroad Retirement Board to the Director of Administration.

§ 369.3 Procedures for obtaining permission to use the seal.

Requests for written permission to use the seal of the Railroad Retirement Board shall be in writing and shall be directed to the Director of Administration of the Railroad Retirement Board. The request should, at a minimum, contain the following information:

(a) Name and address of the requester.

(b) A description of the type of activity in which the requester is engaged or proposes to engage.

(c) A statement of whether the requester considers the proposed use or imitation to be commercial or non-commercial, and why.

(d) A brief description and illustration or sample of the proposed use, as well as a description of the product or service in connection with which it will be used. This description will provide sufficient detail to enable the Director of Administration to determine whether the intended use of the seal is consistent with the interests of the government.

(e) In the case of a non-commercial use, a description of the requesting organization's function and purpose shall be provided.

§ 369.4 Inappropriate Use of the Seal.

The Railroad Retirement Board shall not grant permission for use of the seal in those instances where use of the seal will give the unintended appearance of Agency endorsement or authentication. Situations where use of the seal of the Railroad Retirement Board would be inappropriate include, but are not limited to, the following examples:

(a) A consulting firm makes arrangements with a railroad to conduct a retirement planning seminar for its employees. Included in the material distributed to the seminar attendees is a booklet, prepared by the consulting firm, which displays the seal of the Railroad Retirement Board on the cover and contains information regarding benefits payable under the Railroad Retirement Act.

(b) A former employee of the Railroad Retirement Board owns a coffee and donut shop, frequented by present and past railroad workers. Many of the shop's customers know of the owner's prior employment with the Board and frequently ask him questions related to benefits payable under the Railroad Unemployment Insurance and Railroad Retirement Acts. The shop owner prepares and distributes to his customers a monthly flyer listing benefit questions presented to him during the month, as well as his answers to the questions. The flyer displays the seal of the Board.

(c) A retired railroad employee works part-time in a train hobby shop. The shop owner, at the former railroad worker's suggestion, develops and sells items such as coffee mugs and computer mouse pads with text relevant to benefits paid by the Railroad Retirement Board. The text is taken from publications issued by the Railroad Retirement Board. The merchandise also bears the seal of the Railroad Retirement Board.

§ 396.5 Penalty for misuse of the seal of the Railroad Retirement Board.

Unauthorized use of the seal of the Railroad Retirement Board may result in criminal prosecution under applicable law.

Dated: December 14, 2000.

By Authority of the Board.

For the Board.

Beatrice Ezerski,

Secretary to the Board.

[FR Doc. 01-137 Filed 1-2-01; 8:45 am]

BILLING CODE 7905-01-P

DEPARTMENT OF THE TREASURY**Internal Revenue Service****26 CFR Part 1**

[REG-106702-00]

RIN 1545-AX94

Determination of Basis of Partner's Interest; Special Rules

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking and notice of public hearing.

SUMMARY: This document contains proposed regulations relating to special rules on determination of basis of partner's interest under section 705 of the Internal Revenue Code. The proposed regulations are necessary to coordinate sections 705 and 1032. This document also provides a notice of public hearing on these proposed regulations.

DATES: Written comments must be received by April 3, 2001. Outlines of topics to be discussed at the public hearing scheduled for May 3, 2001, also must be received by April 3, 2001.

ADDRESSES: Send submissions to: CC:M&SP:RU (REG-106702-00), room 5226, Internal Revenue Service, POB 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand delivered Monday through Friday between the hours of 8 a.m. and 5 p.m. to: CC:M&SP:RU (REG-106702-00), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, DC. Alternatively, taxpayers may submit comments electronically via the internet by selecting the "Tax Regs" option on the IRS Home Page, or by submitting comments directly to the IRS internet site at http://www.irs.gov/tax_regs/reglist.html. The public hearing will be held in room 6718, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Concerning the regulations, Barbara MacMillan, (202) 622-3050; concerning submissions, the hearing, and/or to be placed on the building access list to attend the hearing, Sonya Cruse, (202) 622-7180 (not toll-free numbers).

SUPPLEMENTARY INFORMATION:**Background**

In Rev. Rul. 99-57 (1999-51 I.R.B. 678), the IRS issued guidance with respect to the tax consequences for a partnership and a corporate partner where the corporate partner contributes

its own stock to the partnership, and the partnership later exchanges the stock with a third party in a taxable transaction. Under that ruling, section 1032 will protect a corporate partner from recognizing gain or loss (to the extent allocated to such partner) when the partnership exchanges stock of the corporate partner in a taxable transaction. The ruling also concludes that, under section 705, the corporate partner increases its basis in its partnership interest by an amount equal to its share of the gain resulting from the partnership's sale or exchange of the stock.

In situations where a corporation acquires an interest in a partnership that holds stock in that corporation, a section 754 election is not in effect with respect to the partnership for the taxable year in which the corporation acquires the interest, and the partnership later sells or exchanges the stock, it may be inconsistent with the intent of section 705 to increase the basis of the corporation's partnership interest by the full amount of the gain that is not recognized.

For instance, assume that a corporation (A) purchases a 50 percent interest in a partnership for \$100,000. The partnership's only asset is A stock with a basis of \$100,000 and a value of \$200,000. If the partnership had not made a section 754 election, then when the partnership disposes of the property for \$200,000, A would be allocated \$50,000 of gain. Under section 1032, the gain allocated to A would not be subject to tax. If A's basis in the partnership interest were increased to \$150,000 under section 705(a)(1), A would recognize a corresponding \$50,000 loss (or reduced gain) upon a subsequent sale of the partnership interest. In this situation, it would be inconsistent with the intent of section 705 to increase the basis of A's partnership interest for the gain that is not recognized. To do so would create a recognizable loss (or reduced gain) in a situation where no economic loss was incurred and no offsetting gain had previously been recognized.

Accordingly, in Notice 99-57 (1999-51 I.R.B. 692), the IRS announced that it intended to promulgate regulations under section 705 to address certain situations where a corporation acquires an interest in a partnership that holds stock in that corporation, and a section 754 election is not in effect with respect to the partnership for the taxable year in which the corporation acquired the interest. The IRS announced that rules regarding tiered-entity structures also would be included in the regulations. The IRS requested comments as to the

appropriate scope of the regulations regarding other situations where the price paid for a partnership interest reflects built-in gain or accrued income items that will not be subject to tax, or built-in loss or accrued deductions that will be permanently denied, when allocated to the transferee partner, and the partnership has not made an election under section 754. No formal comments were received.

Explanation of Provisions

As discussed in Notice 99-57, these proposed regulations are being issued in order to prevent inappropriate increases or decreases in the adjusted basis of a corporate partner's interest in a partnership resulting from the partnership's disposition of the corporate partner's stock.

The proposed regulations set forth a detailed statement of the purpose for these regulations which is consistent with the discussion in Notice 99-57. The proposed regulations then provide a specific rule implementing this purpose in situations where a corporate partner holds a direct interest in a partnership that owns stock of the corporate partner. This rule applies where a corporation acquires an interest in a partnership that holds stock in that corporation (or the partnership subsequently acquires stock in that corporation in an exchanged basis transaction), the partnership does not have an election under section 754 in effect for the year in which the corporation acquires the interest, and the partnership later sells or exchanges the stock. In these situations, the increase (or decrease) in the corporation's adjusted basis in its partnership interest resulting from the sale or exchange of the stock equals the amount of gain (or loss) that the corporate partner would have recognized (absent the application of section 1032) if, for the taxable year in which the corporation acquired the interest, a section 754 election had been in effect.

The purpose of these proposed regulations cannot be avoided through the use of tiered partnerships or other arrangements. For example, the proposed regulations provide that if a corporation acquires an indirect interest in its own stock through a chain of two or more partnerships (either where the corporation acquires a direct interest in a partnership or where one of the partnerships in the chain acquires an interest in another partnership), and gain or loss from the sale or exchange of the stock is subsequently allocated to the corporation, then the bases of the interests in the partnerships included in

the chain shall be adjusted in a manner that is consistent with the purpose of the proposed regulations. As stated above, the proposed regulations include a statement describing the purpose of these regulations which is intended to guide taxpayers in making basis adjustments in the tiered partnership context. In addition, the proposed regulations include two examples illustrating the basis adjustments that are required by the proposed regulations where a corporation acquires an indirect interest in its own stock through a chain of two or more partnerships.

Proposed Effective Date

The regulations shall apply to gain or loss allocated with respect to sales or exchanges of stock occurring after December 6, 1999.

Special Analyses

It has been determined that this notice of proposed rulemaking is not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations, and because the regulations do not impose a collection of information on small entities, the Regulatory Flexibility Act (5 U.S.C. chapter 6) does not apply. Pursuant to section 7805(f) of the Internal Revenue Code, this notice of proposed rulemaking will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on its impact on small businesses.

Comments and Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any written comments (a signed original and eight (8) copies) that are timely submitted to the IRS. The IRS and the Treasury Department request comments on the clarity of the proposed rule and how it may be made easier to understand. All comments will be available for public inspection and copying.

A public hearing has been scheduled for May 3, 2001, beginning at 10 a.m., in room 6718 of the Internal Revenue Building. Due to building security procedures, visitors must enter at the 10th Street entrance, located between Constitution and Pennsylvania Avenues, NW. In addition, all visitors must present photo identification to enter the building. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 15 minutes

before the hearing starts. For information about having your name placed on the building access list to attend the hearing, see the **FOR FURTHER INFORMATION CONTACT** section of the preamble.

The rules of 26 CFR 601.601(a)(3) apply to the hearing. Persons that wish to present oral comments at the hearing must submit written comments and an outline of the topics to be discussed and the time to be devoted to each topic (signed original and eight (8) copies) by April 3, 2001.

A period of 10 minutes will be allotted to each person for making comments.

An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the hearing.

Drafting Information

The principal author of these proposed regulations is Matthew Lay of the Office of the Associate Chief Counsel (Passthroughs and Special Industries). However, personnel from other offices of the IRS and the Treasury Department participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows:

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 is amended by adding an entry in numerical order to read in part as follows:

Authority: 26 U.S.C. 7805 * * *
1.705-2 also issued under 26 U.S.C. 705.
* * *

Par. 2. Section 1.705-1 is amended by adding paragraph (a)(7) to read as follows:

§ 1.705-1 Determination of basis of partner's interest.

(a) * * *

(7) For basis adjustments necessary to coordinate sections 705 and 1032 in certain situations in which a corporation directly or indirectly acquires an interest in a partnership that holds stock in that corporation, see § 1.705-2.

* * * * *

Par. 3. Section 1.705-2 is added to read as follows:

§ 1.705-2 Basis adjustments coordinating sections 705 and 1032.

(a) *Purpose.* This section is intended to prevent inappropriate increases or decreases in the adjusted basis of a corporate partner's interest in a partnership resulting from the partnership's disposition of the corporate partner's stock. The rules under section 705 generally are intended to preserve equality between the adjusted basis of a partner's interest in a partnership (outside basis) and such partner's share of the adjusted basis in partnership assets (inside basis). In the situation where a section 754 election was not in effect for the year in which the partner acquired its interest, however, a partner's inside basis and outside basis may not be equal. In this situation, gain or loss allocated to the partner upon disposition of the partnership assets that is attributable to the difference between the adjusted basis of the partnership assets absent the section 754 election and the adjusted basis of the partnership assets had a section 754 election been in effect generally will result in an adjustment to the basis of the partner's interest in the partnership under section 705(a). Such gain (or loss) therefore generally will be offset by a corresponding decrease in the gain or increase in the loss (or increase in the gain or decrease in the loss) upon the subsequent disposition by the partner of its interest in the partnership.

Where such a difference exists with respect to stock of a corporate partner that is held by the partnership, gain or loss from the disposition of corporate partner stock attributable to the difference is not recognized by the corporate partner under section 1032. To adjust the basis of the corporate partner's interest in the partnership for this unrecognized gain or loss would not be appropriate because it would create an opportunity for the recognition of taxable gain or loss on a subsequent disposition of the partnership interest where no economic gain or loss has been incurred by the corporate partner and no corresponding taxable gain or loss had previously been allocated to the corporate partner by the partnership.

(b) *Single partnership—(1) Required adjustments.* This paragraph (b) applies in situations where a corporation acquires an interest in a partnership that holds stock in that corporation (or the partnership subsequently acquires stock in that corporation in an exchanged basis transaction), the partnership does not have an election under section 754 in effect for the year in which the corporation acquires the interest, and the partnership later sells or exchanges

the stock. In these situations, the increase (or decrease) in the corporation's adjusted basis in its partnership interest resulting from the sale or exchange of the stock equals the amount of gain (or loss) that the corporate partner would have recognized (absent the application of section 1032) if, for the year in which the corporation acquired the interest, a section 754 election had been in effect.

(2) *Example.* The provisions of this paragraph (b) are illustrated by the following example:

Example. (i) A, B, and C form equal partnership PRS. Each partner contributes \$30,000 in exchange for its partnership interest. PRS has no liabilities. PRS purchases stock in corporation X for \$30,000, which appreciates in value to \$120,000. PRS also purchases inventory for \$60,000, which appreciates in value to \$150,000. A sells its interest in PRS to X for \$90,000 in a year for which an election under section 754 is not in effect. PRS later sells the X stock for \$150,000. PRS realizes a gain of \$120,000 on the sale of the X stock. X's share of the gain is \$40,000. Under section 1032, X does not recognize its share of the gain.

(ii) Normally, X would be entitled to a \$40 increase in the basis of its PRS interest for its allocable share of PRS's gain from the sale of the X stock, but a special rule applies in this situation. If a section 754 election had been in effect for the year in which X acquired its interest in PRS, X would have been entitled to a basis adjustment under section 743(b) of \$60,000 (the excess of X's basis for the transferred partnership interest over X's share of the adjusted basis to PRS of PRS's property). See § 1.743-1(b). Under § 1.755-1(b), the basis adjustment under section 743(b) would have been allocated \$30,000 to the X stock (the amount of the gain that would have been allocated to X from the hypothetical sale of the stock), and \$30,000 to the inventory (the amount of the gain that would have been allocated to X from the hypothetical sale of the inventory).

(iii) If a section 754 election had been in effect for the year in which X acquired its interest in PRS, the amount of gain that X would have recognized upon PRS's disposition of X stock (absent the application of section 1032) would be \$10,000 (X's share of PRS's gain from the stock sale, \$40,000, minus the amount of X's basis adjustment under section 743(b), \$30,000). See § 1.743-1(j). Accordingly, the increase in the basis of X's interest in PRS is \$10,000.

(c) *Tiered partnerships and other arrangements—(1) Required adjustments.* The purpose of these proposed regulations as set forth in paragraph (a) of this section cannot be avoided through the use of tiered partnerships or other arrangements. For example, if a corporation acquires an indirect interest in its own stock through a chain of two or more partnerships (either where the corporation acquires a direct interest in

a partnership or where one of the partnerships in the chain acquires an interest in another partnership), and gain or loss from the sale or exchange of the stock is subsequently allocated to the corporation, then the bases of the interests in the partnerships included in the chain shall be adjusted in a manner that is consistent with the purpose of this section.

(2) *Examples.* The provisions of this paragraph (c) are illustrated by the following examples:

Example 1. Acquisition of upper-tier partnership interest by corporation. (i) A, B, and C form a partnership (UTP), with each partner contributing \$25,000. UTP and D form a partnership (LTP). UTP contributes \$75,000 in exchange for its interest in LTP, and D contributes \$25,000 in exchange for D's interest in LTP. Neither UTP nor LTP has any liabilities. LTP purchases stock in corporation E for \$100,000, which appreciates in value to \$1,000,000. C sells its interest in UTP to E for \$250,000 in a year for which an election under section 754 is not in effect for UTP or LTP. LTP later sells the E stock for \$2,000,000. LTP realizes a \$1,900,000 gain on the sale of the E stock. UTP's share of the gain is \$1,425,000, and E's share of the gain is \$475,000. Under section 1032, E does not recognize its share of the gain.

(ii) With respect to the basis of UTP's interest in LTP, if all of the gain from the sale of the E stock (including E's share) were to increase the basis of UTP's interest in LTP, UTP's basis in such interest would be \$1,500,000 (\$75,000 + \$1,425,000). The fair market value of UTP's interest in LTP is \$1,500,000. Because UTP did not have a section 754 election in effect for the taxable year in which E acquired its interest in UTP, UTP's basis in the LTP interest does not reflect the purchase price paid by E for its interest. Increasing the basis of UTP's interest in LTP by the full amount of the gain that would be recognized (in the absence of section 1032) on the sale of the E stock preserves the conformity between UTP's inside basis and outside basis with respect to LTP (*i.e.*, UTP's share of LTP's cash is equal to \$1,500,000, and UTP's basis in the LTP interest is \$1,500,000) and appropriately would cause UTP to recognize no gain or loss on the sale of UTP's interest in LTP immediately after the sale of the E stock. Accordingly, increasing the basis of UTP's interest in LTP by the entire amount of gain allocated to UTP (including E's share) from LTP's sale of the E stock is consistent with the purpose of this section. The \$1,425,000 of gain allocated by LTP to UTP will increase the adjusted basis of UTP's interest in LTP under section 705(a)(1). The basis of UTP's interest in LTP immediately after the sale of the E stock is \$1,500,000.

(iii) With respect to the basis of E's interest in UTP, if E's share of the gain allocated to UTP and then to E were to increase the basis of E's interest in UTP, E's basis in such interest would be \$725,000 (\$250,000 + \$475,000) and the fair market value of such interest would be \$500,000, so that E would

recognize a loss of \$225,000 if E sold its interest in UTP immediately after LTP's disposition of the E stock. It would be inappropriate for E to recognize a taxable loss of \$225,000 upon a disposition of its interest in UTP because E would not incur an economic loss in the transaction, and E did not recognize a taxable gain upon LTP's disposition of the E stock that appropriately would be offset by a taxable loss on the disposition of its interest in UTP. Accordingly, increasing E's basis in its UTP interest by the entire amount of gain allocated to E from the sale of the E stock is not consistent with the purpose of this section. (Conversely, because A and B were allocated taxable gain on the disposition of the E stock, it would be appropriate to increase A's and B's bases in their respective interests in UTP by the full amount of the gain allocated to them.)

(iv) The appropriate basis adjustment for E's interest in UTP upon the disposition of the E stock by LTP can be determined as the amount of gain that E would have recognized (in the absence of section 1032) upon the sale by LTP of the E stock if both UTP and LTP had made section 754 elections for the taxable year in which E acquired the interest in UTP. If section 754 elections had been in effect for UTP and LTP for the year in which E acquired E's interest in UTP, the following would occur. E would be entitled to a \$225,000 positive basis adjustment under section 743(b) with respect to the property of UTP. The entire basis adjustment would be allocated to UTP's only asset, its interest in LTP. In addition, the sale of C's interest in UTP would be treated as a deemed sale of E's share of UTP's interest in LTP for purposes of sections 754 and 743. The deemed selling price of E's share of UTP's interest in LTP would be \$250,000 (E's share of UTP's adjusted basis in LTP, \$25,000, plus E's basis adjustment under section 743(b) with respect to the assets of UTP, \$225,000). The deemed sale of E's share of UTP's interest in LTP would trigger a basis adjustment under section 743(b) of \$225,000 with respect to the assets of LTP (the excess of E's share of UTP's adjusted basis in LTP, including E's basis adjustment (\$225,000), \$250,000, over E's share of the adjusted basis of LTP's property, \$25,000). This \$225,000 adjustment by LTP would be allocated to LTP's only asset, the E stock, and would be segregated and allocated solely to E. The amount of LTP's gain from the sale of the E stock (before considering section 743(b)) would be \$1,900,000. E's share of this gain, \$475,000, would be offset in part by the \$225,000 basis adjustment under section 743(b), so that E would recognize gain equal to \$250,000 in the absence of section 1032.

(v) If the basis of E's interest in UTP were increased by \$250,000, the total basis of E's interest would equal \$500,000. This would conform to E's share of UTP's basis in the LTP interest ($\$1,500,000 \times \frac{1}{3} = \$500,000$) as well as E's indirect share of the cash held by LTP ($(\frac{1}{3} \times \frac{3}{4}) \times \$2,000,000 = \$500,000$). Such a basis adjustment does not create the opportunity for the recognition of an inappropriate loss by E on a subsequent disposition of E's interest in UTP and is consistent with the purpose of this section.

Accordingly, under paragraph (c) of this section, of the \$475,000 gain allocated to E, only \$250,000 will apply to increase the adjusted basis of E in UTP under section 705(a)(1). E's adjusted basis in its UTP interest following the sale of the E stock is \$500,000.

Example 2. Acquisition of lower-tier partnership interest by upper-tier partnership. (i) A, B, and C form an equal partnership (UTP), with each partner contributing \$100,000. D, E, and F also form an equal partnership (LTP), with each partner contributing \$30,000. LTP purchases stock in corporation B for \$90,000, which appreciates in value to \$900,000. LTP has no liabilities. UTP purchases D's interest in LTP for \$300,000. LTP does not have an election under section 754 in effect for the taxable year of UTP's purchase. LTP later sells the B stock for \$900,000. UTP's share of the gain is \$270,000, and B's share of that gain is \$90,000. Under section 1032, B does not recognize its share of the gain.

(ii) With respect to the basis of UTP's interest in LTP, if all of the gain from the sale of the B stock (including B's share) were to increase the basis of UTP's interest in LTP, UTP's basis in the LTP interest would be \$570,000 (\$300,000 + \$270,000), and the fair market value of such interest would be \$300,000, so that B would be allocated a loss of \$90,000 ($(\$570,000 - \$300,000) \times \frac{1}{3}$) if UTP sold its interest in LTP immediately after LTP's disposition of the B stock. It would be inappropriate for B to recognize a taxable loss of \$90,000 upon a disposition of UTP's interest in LTP. B would not incur an economic loss in the transaction, and B was not allocated a taxable gain upon LTP's disposition of the B stock that appropriately would be offset by a taxable loss on the disposition of UTP's interest in LTP. Accordingly, increasing UTP's basis in its LTP interest by the gain allocated to B from the sale of the B stock is not consistent with the purpose of this section. (Conversely, because E and F were allocated taxable gain on the disposition of the B stock, it would be appropriate to increase E's and F's bases in their respective interests in LTP by the full amount of such gain.)

(iii) The appropriate basis adjustment for UTP's interest in LTP upon the disposition of the B stock by LTP can be determined as the amount of gain that UTP would have recognized (in the absence of section 1032) upon the sale by LTP of the B stock if the portion of the gain allocated to UTP that subsequently is allocated to B were determined as if LTP had made an election under section 754 for the taxable year in which UTP acquired its interest in LTP. If a section 754 election had been in effect for LTP for the year in which UTP acquired its interest in LTP, then with respect to B, the following would occur. UTP would be entitled to a \$90,000 positive basis adjustment under section 743(b), allocable to B, in the property of LTP. The entire basis adjustment would be allocated to LTP's only asset, its B stock. The amount of LTP's gain from the sale of the B stock (before considering section 743(b)) would be \$810,000. UTP's share of this gain, \$270,000, would be offset, in part, by the \$90,000 basis

adjustment under section 743(b), so that UTP would recognize gain equal to \$180,000.

(iv) If the basis of UTP's interest in LTP were increased by \$180,000, the total basis of UTP's partnership interest would equal \$480,000. This would conform to the sum of UTP's share of the cash held by LTP ($\frac{1}{3} \times \$900,000 = \$300,000$) and the taxable gain recognized by A and C on the disposition of the B stock that appropriately may be offset on the disposition of their interests in UTP ($\$90,000 + \$90,000 = \$180,000$). Such a basis adjustment does not inappropriately create the opportunity for the allocation of a loss to B on a subsequent disposition of UTP's interest in LTP and is consistent with the purpose of this section. Accordingly, of the \$270,000 gain allocated to UTP, only \$180,000 will apply to increase the adjusted basis of UTP in LTP under section 705(a)(1). UTP's adjusted basis in its LTP interest following the sale of the B stock is \$480,000.

(v) With respect to B's interest in UTP, if B's share of the gain allocated to UTP and then to B were to increase the basis of B's interest in UTP, B would have a UTP partnership interest with an adjusted basis of \$190,000 ($\$100,000 + \$90,000$) and a value of \$100,000, so that B would recognize a loss of \$90,000 if B sold its interest in UTP immediately after LTP's disposition of the B stock. It would be inappropriate for B to recognize a taxable loss of \$90,000 upon a disposition of its interest in UTP because B would not incur an economic loss in the transaction, and B did not recognize a taxable gain upon LTP's disposition of the B stock that appropriately would be offset by a taxable loss on the disposition of its interest in UTP. Accordingly, increasing B's basis in its UTP interest by the gain allocated to B from the sale of the B stock is not consistent with the purpose of this section. (Conversely, because A and C were allocated taxable gain on the disposition of the B stock that is a result of LTP not having a section 754 election in effect, it would be appropriate for A and C to recognize an offsetting taxable loss on the disposition of A's and C's interests in UTP. Accordingly, it would be appropriate to increase A's and C's bases in their respective interests in UTP by the amount of gain recognized by A and C.)

(vi) The appropriate basis adjustment for B's interest in UTP upon the disposition of the B stock by LTP can be determined as the amount of gain that B would have recognized (in the absence of section 1032) upon the sale by LTP of the B stock if the portion of the gain allocated to UTP that is subsequently allocated to B were determined as if LTP had made an election under section 754 for the taxable year in which UTP acquired its interest in LTP. If a section 754 election had been in effect for LTP for the year in which UTP acquired its interest in LTP, then with respect to B, the following would occur. UTP would be entitled to a basis adjustment under section 743(b) in the property of LTP of \$90,000. The entire basis adjustment would be allocated to LTP's only asset, its B stock. The amount of UTP's gain from the sale of the B stock (before considering section 743(b)) would be \$810,000. UTP's share of this gain, \$270,000, would be offset, in part, by the \$90,000 basis adjustment under

section 743(b), so that UTP would recognize gain equal to \$180,000. The \$90,000 basis adjustment would completely offset the gain that otherwise would be allocated to B.

(vii) If no gain were allocated to B so that the basis of B's interest in UTP was not increased, the total basis of B's interest would equal \$100,000. This would conform to B's share of UTP's basis in the LTP interest $((\$480,000 - \$180,000 \text{ (i.e., A's and C's share of the basis that should offset taxable gain recognized as a result of LTP's failure to have a section 754 election)}) \times \frac{1}{3} = \$100,000$ as well as B's indirect share of the cash held by LTP $((\frac{1}{3} \times \frac{1}{3}) \times \$900,000 = \$100,000)$. Such a basis adjustment does not create the opportunity for the recognition of an inappropriate loss by B on a subsequent disposition of B's interest in UTP and is consistent with the purpose of this section. Accordingly, under paragraph (c) of this section, of the \$90,000 gain allocated to B, none will apply to increase the adjusted basis of B in UTP under section 705(a)(1). B's adjusted basis in its UTP interest following the sale of the B stock is \$100,000.

(d) *Effective date.* This section applies to gain or loss allocated with respect to sales or exchanges of stock occurring after December 6, 1999.

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

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DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG-104683-00]

RIN 1545-AX88

Application of Section 904 to Income Subject to Separate Limitations and Computation of Deemed-Paid Credit Under Section 902

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking and notice of public hearing.

SUMMARY: This document contains proposed Income Tax Regulations relating to the computation of the section 902 deemed-paid credit, the section 904(d) foreign tax credit limitation, and to an example in the section 954 regulations relating to the exclusion of certain export financing interest from foreign personal holding company income. Changes to the applicable law were made by the Tax Reform Act of 1986, the Technical and Miscellaneous Revenue Act of 1988, and the Taxpayer Relief Act of 1997. These regulations would provide guidance needed to comply with these changes

and would affect individuals and corporations reporting subpart F income and claiming foreign tax credits. This document also provides a notice of a public hearing on these proposed regulations.

DATES: Written or electronic comments must be received by April 3, 2001. Outlines of topics to be discussed at the public hearing scheduled for April 26, 2001, at 10 a.m. must be received by April 5, 2001.

ADDRESSES: Send submissions to: Regulations Unit CC (REG-104683-00), room 5226, Internal Revenue Service, POB 7604, Ben Franklin Station, Washington, DC 20044. In the alternative, submissions may be hand-delivered between the hours of 8 a.m. and 5 p.m. to Regulations Unit CC (REG-106409-00), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, DC or sent electronically, via the IRS Internet site at: <http://www.irs.gov/taxregs/regslst.html>. The public hearing will be held in the IRS Auditorium, 7th floor, Internal Revenue Building, 1111 Constitution Ave., NW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Concerning the proposed regulations, Bethany A. Ingwalson (202) 622-3850; concerning submissions of comments, the hearing, and/or to be placed on the building access list to attend the hearing, Sonya Cruse, (202) 622-7180 (not toll-free numbers).

SUPPLEMENTARY INFORMATION:

Background

Treasury and the IRS provided guidance regarding section 904(d) (enacted in 1986) in TD 8214 (1988-2 C.B. 220), TD 8412 (1992-1 C.B. 271), TD 8556 (1994-2 C.B. 165), TD 8805 (1999-1 C.B. 371), and in final regulations (TD 8916) published elsewhere in this issue of the **Federal Register**. Final regulations regarding the computation of the deemed paid credit under section 902 (also enacted in 1986) were published as TD 8708 (1997-1 C.B. 137). The proposed regulations provide further guidance with respect to the application of sections 902 and 904(d).

The proposed regulations also provide guidance regarding the application of section 904(j). The Taxpayer Relief Act of 1997 (Public Law 105-34, 111 Stat. 788) (TRA 1997) added section 904(j) to the Internal Revenue Code (Code). Section 904(j) exempts individuals from the foreign tax credit limitation of section 904(a) in certain limited circumstances, and provides that no foreign taxes may be carried to or from

a year for which a taxpayer has elected to apply section 904(j).

TRA 1997 also added to the Code section 904(b)(2)(C), which provides that the Secretary may issue regulations to modify the application of section 904(b)(2) and (3) to properly reflect capital gain rate differentials under sections 1(h) and 1201(a) and the computation of net capital gain. The proposed regulations provide guidance for the application of section 904(b), including the application of that section in years in which section 1(h) provides for more than one capital gains rate.

Explanation of Provisions

I. Effect of Loss of Domestic Corporate Shareholder on Pooling of Earnings and Taxes in Computing Deemed Paid Credits: § 1.902-1

Under section 902(c)(3), the multi-year pools of post-1986 undistributed earnings and post-1986 foreign income taxes of a foreign corporation are determined by taking into account only periods beginning on and after the first day of the foreign corporation's first taxable year in which a domestic corporation (a "qualifying shareholder") owns 10 percent or more of its voting stock or, in the case of a lower-tier foreign corporation in a "qualified group" described in section 902(b)(2), owns indirectly at least 5 percent of its voting stock.

Under section 902(c)(6)(B), dividends are treated as paid first out of the post-1986 pooled earnings. Pre-1987 accumulated profits (defined in section 902(c)(6)(A) and § 1.902-1(a)(10) to include both earnings accumulated in pre-1987 years and earnings accumulated in post-1986 years preceding the year in which the section 902 ownership requirements are met) are treated as distributed only after the pools are exhausted, and then out of annual layers of earnings and taxes on a last-in, first-out basis. Distributions out of pre-1987 accumulated profits are governed by the section 902 rules in effect under pre-1987 law. Section 902(c)(6)(A).

The rule limiting the multi-year pools of earnings and taxes to post-1986 taxable years beginning with the year in which a foreign corporation first has a qualifying shareholder alleviates the administrative difficulties such shareholders face in reconstructing accumulated earnings and taxes accounts in connection with their acquisition of stock in a pre-existing foreign corporation. While section 902 provides that pooling of earnings and taxes begins only when the foreign corporation first has a qualifying

shareholder entitled to compute a credit for deemed-paid taxes, the statute does not provide for any change in a foreign corporation's post-1986 undistributed earnings and taxes pools following a stock disposition or other transaction after which the foreign corporation no longer has a qualifying shareholder. Section 1.902-1(a)(13)(i) currently provides that, once a foreign corporation begins to maintain pools of earnings and taxes, the pools include periods during which the stock ownership requirements of section 902 are not met. Should such a corporation later again have a qualifying shareholder, such a shareholder would have to reconstruct the post-1986 undistributed earnings and taxes pools to include undistributed earnings and taxes for periods during which there was no qualifying shareholder, in order to compute deemed-paid credits with respect to distributions of earnings and profits accumulated during later periods in which the ownership requirements were met.

Treasury and the IRS believe that the policy concerns underlying the rule deferring the start of pooling until the corporation has a qualifying shareholder also apply to the situation where a foreign corporation once had, but no longer has, such a shareholder. Therefore, Treasury and the IRS believe it is appropriate to stop the multi-year pooling of earnings and taxes at the foreign corporation level when a foreign corporation no longer has a qualifying shareholder.

The proposed regulations would amend § 1.902-1(a)(10) to provide that pre-1987 accumulated profits subject to the annual layering rules of pre-1987 law include not only the actual pre-1987 earnings and profits and pre-pooling earnings and profits described in the current final regulation, but also formerly pooled earnings and profits of a less-than-10%-U.S.-owned foreign corporation attributable to post-1986 years during which the section 902 stock ownership requirements were met, and post-pooling earnings and profits accumulated during subsequent taxable years during which the foreign corporation did not have a qualifying shareholder. The formerly pooled earnings would be considered pre-1987 accumulated profits of the last taxable year of the foreign corporation as of the end of which the ownership requirements were met. Distributions out of formerly pooled earnings would be subject to the same pre-1987 law rules as distributions of other pre-1987 accumulated profits, except that the formerly pooled foreign income taxes related to the formerly pooled earnings

would continue to be maintained in U.S. dollars. The proposed regulations would also amend § 1.902-1(a)(13) to provide that pooling of earnings and taxes would resume in the first subsequent taxable year as of the end of which the foreign corporation again has a qualifying shareholder. Formerly pooled earnings would continue to be treated as pre-1987 accumulated profits even if the foreign corporation later began to maintain pools of earnings and taxes again.

Treasury and the IRS believe the proposed rules would be easier for taxpayers to apply than the current regulations, which require pooling to continue through periods when the foreign corporation has no shareholders entitled to compute a deemed-paid credit. These proposed amendments complement the proposed amendments to the section 904 regulations, described below, concerning the effect of intervening noncontrolled status on the look-through pools of post-1986 undistributed earnings and taxes maintained by a controlled foreign corporation. The proposed regulations also would be consistent with the approach taken in recently proposed amendments to the regulations under section 367(b) relating to the carryover of earnings and taxes accounts in reorganizations involving foreign corporations (REG-116050-99, published in the **Federal Register** (65 FR 69138) on November 15, 2000).

II. Separate Categories: § 1.904-4

A. The Active Rents and Royalties Exception

Section 1.904-4(b)(2) sets forth the active rents and royalties exception to the separate limitation for passive income. This exception currently applies only to payments from unrelated payors. Several commentators have requested that Treasury and the IRS amend the regulations to provide that royalties received from a member of the recipient's affiliated group (including foreign affiliates) may qualify for the exception if the royalties are derived in the conduct of an active trade or business and the payor uses the underlying property in an active trade or business. As explained below, Treasury and the IRS propose to adopt a modified version of the suggested change.

Section 904(d)(2)(A)(i) defines passive income as foreign personal holding company income, as defined in section 954(c). The section 904(d) active rents and royalties exception derives from section 954(c)(2)(A), which excludes from foreign personal holding company

income, and thus from passive income, any rents or royalties derived in the active conduct of a trade or business and received from an unrelated person. The current final regulations at § 1.904-4(b)(2)(ii) modify this exception to take into account activities of members of the recipient's affiliated group in determining whether the recipient meets the active trade or business prong of the test for section 904(d) purposes.

Treasury and the IRS have consistently declined to extend look-through treatment to payments from foreign non-controlled payors. See TD 8412 (1992-1 C.B. 271, 273). Treasury and the IRS continue to believe that the nature of the income earned by a foreign non-controlled payor from the use of the licensed property should not determine whether a rent or royalty payment constitutes income from the active conduct of a trade or business of the recipient.

However, Treasury and the IRS have decided that it is appropriate to eliminate the distinction between royalties received from related and unrelated payors in applying the active rents and royalties exception for purposes of section 904(d). Therefore, these regulations propose to amend prospectively § 1.904-4(b)(2) to provide that for purposes of section 904 (but not for purposes of section 954), the active rents and royalties exception will not require that the rents and royalties be received from an unrelated payor. This change is proposed to apply to rents and royalties paid or accrued more than 60 days after the date that these regulations are published in final form.

B. Restriction of Affiliated Group Special Rule for Active Rents and Royalties Exception

As noted, § 1.904-4(b)(2)(ii) provides that, for purposes of the active rents and royalties exception from passive income under section 904, rents or royalties will be treated as derived in the active conduct of a trade or business by a United States person or controlled foreign corporation if any member of the recipient's affiliated group (defined to include foreign corporations) meets the requirements of section 954(c)(2)(A) with respect to the licensed property. The proposed regulations would amend the definition of affiliated group for purposes of § 1.904-4(b)(2)(ii) to include only U.S. corporations and controlled foreign corporations in which United States members of the affiliated group own, directly or indirectly, at least 80 percent of the stock (by vote and value). This requirement is consistent with the affiliated group rules of § 1.904-4(e)(3)(ii), which consider the activities

of other members of the affiliated group for purposes of determining whether an entity is a financial services entity. The proposed regulations revise the affiliated group rule in the active rents and royalties exception due to administrative concerns regarding the difficulty of determining whether related, but non-controlled, foreign corporations engage in the active conduct of a trade or business with respect to licensed property.

C. Effect of Intervening Noncontrolled or Less-Than-10%-U.S.-Owned Status on Distributions From a Controlled Foreign Corporation or Other Look-Through Corporation

Under section 904(d)(2)(E)(i) and § 1.904-4(g)(3)(i), dividends from a controlled foreign corporation (CFC) are treated as dividends from a noncontrolled section 902 corporation to the extent that the distribution is out of earnings and profits accumulated during periods in which the distributing corporation was not a CFC. Proposed § 1.904-4(g)(3)(i)(C)(1) provides rules to address the effect of intervening noncontrolled status on the eligibility for look-through treatment of distributions of pre-2003 accumulations of pooled earnings and profits from a CFC. Consistent with the proposed amendments to § 1.902-1(a) previously discussed, proposed § 1.904-4(g)(3)(i)(C)(2) provides rules to address the effect of intervening less-than-10%-U.S.-owned status on the post-1986 undistributed earnings and taxes pools and pre-1987 accumulated profits of a foreign corporation and the application of the look-through rules to distributions from such a foreign corporation. The proposed regulations anticipate to some extent, but do not provide comprehensive guidance, regarding the changes to the statutory look-through rules for 10/50 companies that become effective for post-2002 taxable years. Additional conforming changes to the provisions of §§ 1.904-4 and 1.904-5 will be required to reflect the changes in terminology reflected in the proposed regulations that are necessitated by these statutory changes.

The proposed regulations provide that, when a CFC becomes a non-look-through 10/50 corporation (because it ceases to be controlled by United States shareholders, but has at least one qualifying shareholder, in a taxable year beginning before January 1, 2003), post-1986 undistributed earnings that were accumulated through the end of the taxable year preceding the taxable year in which the decontrolling event occurred and that were previously eligible for look-through treatment will

be consolidated in, and constitute the opening balance of, a single non-look-through pool at the foreign corporation level. The regulations provide that distributions of the prior look-through earnings will continue to be treated as dividends from a non-look-through 10/50 corporation, and will not be eligible for look-through treatment, even if the foreign corporation later becomes a CFC again or becomes eligible for look-through treatment with respect to earnings accumulated in post-2002 taxable years.

Distributions of post-1986 undistributed earnings in the non-look-through pool will be treated as dividends from a non-look-through 10/50 corporation (10/50 dividend income) when distributed to a qualifying shareholder, or as passive income when distributed to any other shareholder. Pre-1987 accumulated profits distributed after a decontrolling event will similarly be treated as 10/50 dividend income or as passive income when distributed, depending on the status of, and the amount of stock owned by, the shareholder at the time of distribution. Because the separate limitation treatment of distributions during the taxable year is computed with reference to year-end pools of post-1986 undistributed earnings under section 902, the proposed regulations provide that distributions to a qualifying shareholder that are made in the taxable year in which a decontrolling event occurs are treated as 10/50 dividend income to qualifying shareholders, or passive income to other shareholders, whether made before or after the decontrolling event. Similarly, under § 1.904-4(g)(3)(iii), earnings and profits accumulated in the year in which a foreign corporation becomes a CFC are treated as accumulated after the corporation became a CFC. Such earnings will be eligible for look-through treatment when distributed to a United States shareholder during the taxable year in which the distributing corporation becomes a CFC or during any subsequent taxable year until the distributing corporation ceases to be a CFC or other look-through corporation.

As noted, the proposed regulations do not permit look-through treatment for earnings and profits accumulated in pre-2003 taxable years while the distributing corporation was a CFC if the earnings are distributed after an intervening period ending before 2003 during which the corporation was not a CFC, even if the corporation is a CFC or other look-through corporation at the time of distribution. Earnings and profits previously eligible for look-through treatment will be placed in a

single non-look-through pool with new earnings accumulated in taxable years beginning before January 1, 2003, while the corporation is not a CFC. The proposed rule would eliminate the need to determine whether distributions made while the corporation is a non-look-through 10/50 corporation (or, after 2002, a 10/50 look-through corporation) are made out of look-through earnings accumulated in pre-2003 years prior to the decontrolling event or pre-2003 non-look-through earnings accumulated afterwards. Treasury and the IRS believe this rule would be simpler to apply with respect to pre-2003 periods during which the records necessary to establish look-through treatment are less likely to be maintained by a foreign corporation that is not controlled by United States shareholders.

This intervening noncontrolled status situation differs from the special situation described in § 1.904-4(g)(3)(ii), which allows look-through treatment on distributions to a more-than-90-percent United States shareholder after August 6, 1997, of earnings and profits that were accumulated while the distributing corporation was a CFC. In the latter case, pre-acquisition post-1986 undistributed earnings of a CFC with a more-than-90-percent United States shareholder were required to be maintained in a non-look-through pool prior to the effective date of the amendment to section 904(d)(2)(E)(i) by TRA 1997. During the entire period the non-look-through pool was required to be maintained, the corporation was a CFC that was more-than-90-percent-owned by a single domestic corporation. Accordingly, the rules governing the effect of the 1997 repeal of the rule limiting look-through treatment to earnings accumulated while the more-than-90-percent United States shareholder was a United States shareholder of the distributing corporation do not provide an appropriate model for resolving the ongoing issue addressed by the proposed regulations.

Section 904(d)(4) as amended by section 1105(b) of TRA 1997 effective for taxable years beginning after December 31, 2002, will generally extend the look-through rules to distributions of earnings accumulated by a 10/50 company in post-2002 taxable years. Accordingly, non-look-through 10/50 corporations will not exist after 2002, although 10/50 look-through corporations will continue to maintain non-look-through pools of earnings and taxes accumulated in pre-2003 taxable years. Therefore, if the regulations are finalized prospectively, the effect of proposed § 1.904-

4(g)(3)(i)(C)(1) generally would be limited to situations involving a CFC that is decontrolled after the regulations become final but before January 1, 2003, and to earnings that are accumulated in taxable years beginning before January 1, 2003, and that are not treated as distributed to the CFC's U.S. shareholders under section 1248 in connection with the decontrolling event. Comments are requested as to whether the simplification objectives of the regulation could best be met by extending the effective date to cover decontrolling events that occurred in prior periods.

Consistent with the proposed amendments to § 1.902-1(a) and with the approach taken with respect to the pre-2003 decontrol situation, § 1.904-4(g)(3)(i)(C)(2) of the proposed regulations provides that distributions out of formerly pooled earnings that are converted to an annual layer of pre-1987 accumulated profits when a foreign corporation no longer has a qualifying shareholder will be treated as distributions from a non-look-through 10/50 corporation, even if the foreign corporation later becomes a look-through corporation again.

The proposed regulations reserve on the treatment of distributions from a 10/50 look-through corporation, including the treatment of distributions out of earnings and profits accumulated in periods before the taxpayer acquired its stock. Comments are requested on whether additional guidance is needed to clarify the rules governing distributions from CFCs, and on how the regulations should be modified to reflect the rules of section 1105(b) of TRA 1997, extending look-through treatment to distributions from 10/50 corporations out of earnings and profits accumulated in post-2002 taxable years.

D. Additional Separate Categories

Treasury and the IRS propose to add a new paragraph (m) to § 1.904-4, to provide that if section 904(a), (b), and (c) are applied separately to any category of income under the Code (for example, under section 901(j), 865(h), or 904(g)(10)), that category of income (additional category) will be treated for purposes of the Code and regulations (including, for example, section 904(f)) as if it were a separate category listed in sections 904(d)(1) and 904(d)(3)(F)(i). This amendment is intended to clarify the treatment of such additional separate categories without the need for specific cross-references to such categories each time a provision refers to the separate categories listed in section 904(d). Sections 1.904-4(a) and 1.904-5(a)(1) are amended to include a

reference to such additional separate categories.

III. Allocation and Apportionment of Taxes to Separate Categories: § 1.904-6

Treasury and the IRS propose to amend § 1.904-6(a)(1) to clarify the rules for determining the amount of income (in each U.S. separate category) taxed by a foreign country, in situations in which foreign law does not provide expense allocation rules. In such cases, for purposes of determining the amount of income taxed by the foreign country in order to allocate and apportion foreign taxes to separate categories, a taxpayer must allocate the expenses that are deductible under foreign law using the same methods that the taxpayer uses to allocate expenses that are deductible under U.S. law for purposes of determining the amount of taxable income.

IV. Capital Gain and Loss Adjustments: § 1.904(b)-1

A. Section 904(b) Capital Gain and Loss Adjustments

The proposed regulations provide guidance regarding the rule of section 904(b)(2)(A) that foreign source capital gain may not exceed the lesser of capital gain net income from sources outside the United States or worldwide capital gain net income. A similar rule applies with respect to net capital gain. The regulations also provide guidance regarding the rule of section 904(b)(2)(B) that capital gains from foreign and U.S. sources, and capital losses from foreign sources, must be adjusted based on capital gain rate differential amounts. The proposed regulations exercise the regulatory authority granted under section 904(b)(2)(C) (authorizing regulations to modify the application of section 904(b)(2) and (3) to properly reflect capital gain rate differentials and the computation of net capital gain) and section 904(d)(6) (authorizing such regulations as may be necessary and appropriate for the purposes of section 904(d)).

The proposed regulations first provide guidance concerning the adjustments required when foreign source capital gains exceed the lesser of capital gain net income (or net capital gain) from sources outside the United States or capital gain net income (or net capital gain) from all sources. Section 904(b)(2)(A) and section 904(b)(2)(B)(i) provide that, for purposes of section 904, foreign source capital gains that are included in foreign source taxable income may not exceed the lesser of capital gain net income from sources outside the United States or capital gain

net income from all sources. Section 904(b)(2)(A), (3)(A). Similar rules apply for purposes of determining foreign source net capital gain. Section 904(b)(3)(B). After the 1986 enactment of separate limitation categories in section 904(d), the issue arises as to the extent to which foreign source capital gains should be adjusted if the taxpayer has foreign source capital gains and losses in more than one separate category.

The proposed regulations provide that foreign source capital gains included in foreign source taxable income in any separate category are reduced by reason of section 904(b)(2)(A) and section 904(b)(2)(B)(i) only by foreign source capital losses in the same separate category and by a ratable portion of the excess of capital gain net income from foreign sources (in the aggregate, considering all of the taxpayer's separate categories) over capital gain net income from all sources (considering capital gains and losses from sources within and outside the United States, from all of the taxpayer's separate categories). Thus, the proposed rule would reduce capital gain net income from foreign sources in any separate category only if the taxpayer has a net U.S.-source capital loss, and not in instances where foreign-source capital gains in one separate category are offset only by foreign-source capital losses from another separate category. This rule implements Congress's intent that section 904(b)(2)(A) and section 904(b)(2)(B)(i) should prevent foreign-source capital gains from inappropriately increasing the numerator of the foreign tax credit limitation fraction under section 904(a) if those capital gains were offset by U.S.-source capital losses, while avoiding the potential for double counting of foreign-source losses that might result if foreign-source gains in one separate category were reduced by reason of foreign-source losses that reduce ordinary income in another separate category.

The regulations further provide that if the taxpayer's capital gain net income from sources outside the United States exceeds the taxpayer's capital gain net income from all sources (*i.e.*, where there is a net U.S. capital loss), a pro rata portion of such excess reduces the capital gain net income from sources outside the United States in each of the taxpayer's separate limitation categories and, within each separate category, in each rate group. The pro rata portion is determined based on the relative amounts of net capital gain from sources outside the United States in each separate category or rate group.

In addition, the proposed regulations provide guidance on adjusting capital gains and foreign capital losses to reflect capital gain rate differentials. Section 904(a) limits the foreign tax credit to the lesser of (1) foreign tax paid or accrued; or (2) pre-credit U.S. tax multiplied by a fraction equal to foreign source taxable income over worldwide taxable income (the limitation fraction). Multiplying the pre-credit U.S. tax by the limitation fraction is meant to determine the portion of U.S. taxes that are attributable to foreign source income. Section 904(b)(2)(B) adjusts capital gains in the numerator and denominator, and foreign source capital losses in the numerator, of the limitation fraction if capital gains are taxed at lower rates than ordinary income, as is often the case under current law for individuals. Unless capital gains and foreign capital losses are adjusted to account for this difference, the limitation fraction will not accurately reflect the portion of the total pre-credit U.S. tax that is properly attributable to foreign source income.

The rate differential adjustments to capital gains and foreign source capital losses, under section 904(b) and the proposed regulations, apply only if the specific taxpayer has net capital gain that is subject to reduced tax rates for the taxable year. Treasury and the IRS request comments with respect to applying on an elective basis adjustments based on rate differentials for taxable years in which the Code applies reduced tax rates to capital gains generally, but the specific taxpayer has capital losses that equal or exceed capital gains. Any such elective rule would need to include ordering rules for determining the source, the separate category, and the rate group of the capital losses that are taken into account for the current taxable year, including those capital losses that are currently deductible to the extent of \$3,000 under section 1211(b) against ordinary income, and those losses that are subject to the capital loss carryover rules.

As noted, section 904(b)(2)(C) grants regulatory authority to modify the application of section 904(b)(2) and (3) "to the extent necessary to properly reflect any capital gain rate differential under section 1(h) or 1201(a) and the computation of net capital gain." The proposed regulations exercise this authority and adjust the section 904(b)(2)(B) calculations to reflect the fact that, for taxable years ending after May 6, 1997, section 1(h) contains multiple capital gains rates. The proposed regulations thus require that capital gain net income, from sources outside the United States and from all sources, must be adjusted pursuant to

section 904(b)(2)(B)(i) and (ii) by the rate differential portion of each rate group of the taxpayer's net capital gain from sources outside the United States and from all sources, respectively.

The proposed regulations also provide guidance on adjusting foreign source capital losses under section 904(b)(2)(B)(iii). The regulations clarify that such capital losses (after netting against foreign source capital gains in the same rate group, as defined in the regulations) should be reduced based on the tax rate applicable under section 1(h) to the net capital gains that are offset by such net capital losses in the determination of the taxpayer's taxable income. Although section 904(b)(2)(B)(iii) provides for such adjustment in instances when net foreign losses have offset U.S. source capital gains, the existence of multiple separate categories after 1986 may result in foreign source capital gains and losses in separate categories offsetting one another. Therefore, the regulations require adjustment of foreign capital losses that offset foreign source capital gains associated with different capital gains rates, in addition to foreign capital losses that offset U.S. source capital gains.

In determining which capital gains are offset by capital losses from sources outside the United States in different rate groups, the proposed regulations provide that net capital losses from sources within the United States will not be taken into account, in order to simplify this determination. Treasury and the IRS request comments regarding whether the regulations should take net capital losses from sources within the United States into account for such purposes, and, if so, what type of ordering rules should be applied.

The IRS is considering providing a simplified worksheet for performing the section 904(b)(2)(B) adjustments in the Form 1116 instructions, for taxpayers whose capital gains are subject only to 10 or 20 percent tax rates under section 1(h) (similar to the simplified worksheet provided in the 1999 Form 1040 instructions as an alternative to Schedule D for taxpayers whose capital gains are subject only to 10 and 20 percent tax rates under section 1(h)). Treasury and the IRS request comments on this approach.

B. Appropriate tax rates for AMT foreign tax credit calculation

The proposed regulations provide that the alternative minimum tax (AMT) rates, rather than the regular tax rates, apply for purposes of carrying out the section 904(b) capital gains rates adjustments for the AMT foreign tax

credit. Section 904(b) generally adjusts capital gains and foreign source capital losses based on the difference between the maximum U.S. tax rate and the tax applicable to capital gains under section 1(h). This adjustment is necessary to calculate more accurately the amount of U.S. tax that is attributable to foreign source income (as determined by application of the section 904(a) fraction). Section 59(a)(1)(B) provides that the AMT foreign tax credit must be determined as if "section 904 were applied on the basis of alternative minimum taxable income," and therefore requires the application of section 904(b) in determining the AMT foreign tax credit. In order to reflect more accurately the amount of pre-credit tentative minimum tax attributable to foreign source AMT income, these regulations provide that, for purposes of applying section 904(b) in determining the AMT foreign tax credit, the maximum AMT rates should be used rather than the rates specified in section 1.

In addition, the regulations clarify that section 904(b)(2)(B)(ii) (relating to capital gains from all sources), as well as section 904(b)(2)(B)(i) and (iii) (relating to foreign source capital gains and losses, respectively) apply (in modified form, as provided in section 59) to the determination of the AMT foreign tax credit. The regulations also clarify that section 904(b) applies to taxpayers electing to apply the simplified foreign tax credit limitation rules under section 59(a)(4).

V. Coordination of Section 904(j) with Carryforward and Carryback Rules: § 1.904(j)

Section 904(j) allows a taxpayer to elect not to apply section 904(a) (the foreign tax credit limitation fraction) if the taxpayer's creditable foreign taxes paid or accrued for the year are \$300 or less (\$600 or less for joint filers), the taxpayer's foreign source gross income consists entirely of passive income, and such income and taxes are reported to the taxpayer on a payee statement. If a taxpayer elects to apply section 904(j) for any taxable year, no foreign taxes paid or accrued in such year may be carried over to any other year, and no foreign taxes paid or accrued in any other year may be carried over to the section 904(j) election year.

The proposed regulations clarify that a taxpayer may elect to apply section 904(j) for a taxable year only if all of the taxes paid or accrued for the taxable year and for which a credit is allowable to the taxpayer under section 901 for the taxable year are creditable foreign taxes (as defined in section 904(j)(3)(B). For

example, suppose that in year 2, the taxpayer accrues and pays foreign tax that was not shown on a payee statement furnished to the taxpayer and that is related to general limitation income that was recognized and included in income for U.S. tax purposes in year 1. If the foreign taxes in the general limitation category are creditable under section 901 for year 2, the taxpayer may not elect to apply section 904(j) for year 2, even if all of the taxpayer's income in year 2 is qualified passive income.

In addition, taxpayers requested clarification on the application of the carryover provisions in taxable years following section 904(j) election years. Because high-taxed income, as defined in section 904(d)(2)(F), is calculated by reference to the highest rate of tax specified in section 1 or 11 (whichever is applicable), Treasury and the IRS expect that some individual taxpayers who are eligible to elect the application of section 904(j) may have foreign tax credit carryovers in the passive income category.

The proposed regulations clarify that the amount of a foreign tax credit carryover to or from a non-section-904(j)-election year is not reduced to account for the part of the carryover that (but for section 904(j)) could have been used in intervening section 904(j)-election years. Section 904(j) was intended to allow taxpayers to avoid computing the section 904(a) limitation fraction. See Committee on the Budget, U.S. House of Representatives, Report on Revenue Reconciliation Act of 1997, June 24, 1997, at 520–21. Requiring taxpayers to compute the amount of carryover that could have been used in the election year would be inconsistent with the statutory purpose of making the credit provisions less complex and less burdensome for taxpayers with small amounts of solely passive foreign-source income reported on payee statements. (Taxpayers may, of course, choose to perform the calculations to determine whether electing the application of section 904(j) would be more advantageous for them, particularly for years in which a foreign tax credit carryover will expire.)

However, the section 904(j) election does not extend the carryforward and carryback periods under section 904(c). For example, if a carryforward expires in 2000, and the taxpayer elects the application of section 904(j) for the 2000 taxable year, the carryforward cannot be used in 2000 (pursuant to section 904(j)(1)(C)) or in any later year (pursuant to the expiration of the carryforward period).

Similarly, the determination of whether the taxpayer paid or accrued more than \$300 (or \$600) of creditable foreign taxes is made without regard to carryovers. For example, a single taxpayer who pays \$300 of creditable foreign taxes in 2001, and has a \$500 carryover to 2001 from a previous year, is eligible to elect the application of section 904(j) for the 2001 year.

However, if the election is made, the taxpayer cannot claim a credit in 2001 for the \$500 otherwise treated as a carryover.

VI. Removal of Example in § 1.954–2

The proposed regulations remove *Example 2* under § 1.954–2(b)(2)(iv), which was intended to illustrate the application of the rules under § 1.954–2(b)(2) for the exception from foreign personal holding company for certain export financing interest. Treasury and the IRS are concerned that the example may be unintentionally confusing. For this reason, it is being removed. Comments are invited concerning whether a replacement example is necessary.

Special Analyses

It has been determined that this notice of proposed rulemaking is not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations, and because the regulations do not impose a collection of information on small entities, the Regulatory Flexibility Act (5 U.S.C. chapter 6) does not apply. Pursuant to section 7805(f) of the Code, this notice of proposed rulemaking will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on their impact on small business.

Comments and Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any electronic or written comments (a signed original and eight (8) copies) that are submitted timely to the IRS. The IRS and Treasury Department request comments on the clarity of the proposed rules and how they can be made easier to understand. All comments will be available for public inspection and copying.

A public hearing has been scheduled for April 26, 2001, beginning at 10 a.m. in the IRS Auditorium, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC. Due to building

security procedures, visitors must enter at the 10th Street entrance, located between Constitution and Pennsylvania Avenues, NW. In addition, all visitors must present photo identification to enter the building. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 15 minutes before the hearing starts. For information about having your name placed on the building access list to attend the hearing, see the **FOR FURTHER INFORMATION CONTACT** section of this preamble.

The rules of 26 CFR 601.601(a)(3) apply to the hearing. Persons who wish to present oral comments at the hearing must submit electronic or written comments and an outline of the topics to be discussed and the time to be devoted to each topic (signed original and eight (8) copies) by April 5, 2001. A period of 10 minutes will be allotted to each person for making comments. An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the hearing.

Drafting Information

The principal author of these proposed regulations is Rebecca I. Rosenberg of the Office of Associate Chief Counsel (International), within the Office of Chief Counsel, Internal Revenue Service. However, other personnel from the IRS and Treasury participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows:

PART 1—INCOME TAX; TAXABLE YEARS BEGINNING AFTER DECEMBER 31, 1953

Paragraph 1. The authority citation for part 1 is amended by removing the entry for “Section 1.902–1 and 902–2” and “1.094–4 through 1.904–7”, and adding entries in numerical order to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

Section 1.902–1 also issued under 26 U.S.C. 902(c)(7). * * *

Section 1.904–4 also issued under 26 U.S.C. 904(b)(2)(C) and 904(d)(5).

Section 1.904–5 also issued under 26 U.S.C. 902(d)(5).

Section 1.904–6 also issued under 26 U.S.C. 904(d)(5).

Section 1.904-7 also issued under 26 U.S.C. 902(d)(5). * * *

Par. 2. Section 1.902-0 is amended by:

1. Revising the entry for § 1.902-1(a)(13)(ii).

2. Adding an entry for § 1.902-1(a)(13)(iii).

The revisions and additions read as follows:

§ 1.902-0 Outline for regulations provisions for section 902.

* * * * *

§ 1.902-1 Credit for domestic corporate shareholder of a foreign corporation for foreign income taxes paid by the foreign corporation.

(a) * * *

(13) * * *

(ii) Resumption of pooling.

(iii) Examples.

* * * * *

Par 3. Section 1.902-1 is amended as follows:

1. Paragraph (a)(8)(ii) is amended by revising the second sentence.

2. Paragraph (a)(10)(i) is revised.

3. Paragraph (a)(10)(iii) is amended by revising the last sentence and adding one sentence.

4. Paragraphs (a)(13)(i)(A) and (a)(13)(i)(B) are revised.

5. Paragraphs (a)(13)(i)(C) and (a)(13)(i)(D) are added.

6. Paragraph (a)(13)(ii) is revised.

7. Paragraph (a)(13)(iii) is added.

The revisions and additions read as follows:

§ 1.902-1 Credit for domestic corporate shareholder of a foreign corporation for foreign income taxes paid by the foreign corporation.

(a) * * *

(8) * * *

(ii) * * * Foreign income taxes (other than taxes attributable to formerly pooled earnings that are maintained in United States dollars) that are deemed paid with respect to a distribution of pre-1987 accumulated profits shall be translated from the functional currency of the lower-tier corporation into dollars at the spot exchange rate in effect on the date of the distribution. * * *

* * * * *

(10) * * * (i) The term pre-1987 accumulated profits means the amount of the earnings and profits of a foreign corporation computed in accordance with section 902 and attributable to its taxable years beginning before January 1, 1987 (pre-1987 earnings). If the special effective date of paragraph (a)(13)(i) of this section applies, pre-1987 accumulated profits also includes any earnings and profits (computed in

accordance with section 964(a) and 986) attributable to the foreign corporation's taxable years beginning after December 31, 1986, but before the first day of the first taxable year of the foreign corporation in which the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section are met with respect to that corporation (pre-pooling earnings). Pre-1987 accumulated profits also includes any post-1986 undistributed earnings formerly maintained by a less-than-10%-U.S.-owned foreign corporation (as defined in § 1.904-4(g)(1)) that are attributable to the foreign corporation's taxable years beginning after December 31, 1986, as of the end of which such ownership requirements were met (formerly pooled earnings). Such formerly pooled earnings shall be considered pre-1987 accumulated profits of the last taxable year of the foreign corporation in which such ownership requirements were met as of the end of the taxable year. Pre-1987 accumulated profits also includes earnings and profits accumulated during subsequent taxable years of such a less-than-10%-U.S.-owned foreign corporation as of the end of which such ownership requirements were not met (post-pooling earnings). All four types of pre-1987 accumulated profits described in this paragraph (a)(10)(i) are also sometimes referred to as pre-pooling annual layers.

* * * * *

(iii) * * * Foreign income taxes deemed paid with respect to a distribution of pre-1987 accumulated profits shall be translated from the functional currency of the distributing corporation into United States dollars at the spot exchange rate in effect on the date of the distribution, except that foreign income taxes attributable to formerly pooled earnings described in the third sentence of paragraph (a)(10)(i) of this section shall be maintained in United States dollars as originally translated in accordance with section 986(a). Post-1986 foreign income taxes attributable to such formerly pooled earnings shall be treated as pre-1987 foreign income taxes.

* * * * *

(13) * * * (i) * * *

(A) The post-1986 undistributed earnings and post-1986 undistributed foreign income taxes of the foreign corporation shall be determined by taking into account only consecutive taxable years beginning on and after the first day of the first taxable year of the foreign corporation as of the end of which the ownership requirements of section 902(c)(3)(B) and paragraphs

(a)(1) through (4) of this section are met and ending before the first day of a subsequent taxable year in which such ownership requirements are not met as of the end of the taxable year;

(B) Earnings and profits accumulated prior to the first day of the first taxable year of the foreign corporation as of the end of which such ownership requirements are met shall be considered pre-1987 accumulated profits (which may include both pre-pooling earnings and pre-1987 earnings);

(C) Formerly pooled earnings described in paragraph (a)(10)(i) of this section shall be considered pre-1987 accumulated profits of the taxable year ending immediately before the next taxable year in which such ownership requirements are not met as of the end of the taxable year; and

(D) Earnings and profits accumulated on and after the first day of a taxable year of the foreign corporation as of the end of which such ownership requirements are not met shall be considered pre-1987 accumulated profits (post-pooling earnings).

(ii) *Resumption of pooling.* If the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section are again met with respect to a foreign corporation that originally maintained pools of post-1986 undistributed earnings and post-1986 foreign income taxes but converted such pools to pre-1987 accumulated profits (formerly pooled earnings) and associated pre-1987 foreign income taxes because such ownership requirements were not met as of the close of a subsequent post-1986 taxable year, then the post-1986 undistributed earnings and post-1986 foreign income taxes of the foreign corporation shall be determined by taking into account only taxable years beginning on and after the first day of the first such subsequent taxable year of the foreign corporation as of the end of which such ownership requirements are met and ending before the first day of a subsequent taxable year in which such ownership requirements are not met as of the end of the taxable year. The post-pooling earnings, formerly pooled earnings, pre-pooling earnings, and pre-1987 earnings of such a foreign corporation shall continue to be considered pre-1987 accumulated profits. The rules of paragraph (a)(13)(i)(B) through (D) of this section shall apply if such a foreign corporation again becomes a less-than-10%-U.S.-owned foreign corporation.

(iii) *Examples.* The following examples illustrate the special effective date rules of this paragraph (a)(13):

Example 1. As of December 31, 1991, and since its incorporation, foreign corporation A has owned 100 percent of the stock of foreign corporation B. Corporation B is not a controlled foreign corporation. Corporation B uses the calendar year as its taxable year, and its functional currency is the u. Assume 1u equals \$1 at all relevant times. On April 1, 1992, Corporation B pays a 200u dividend to Corporation A and the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section are not met at that time. On July 1, 1992, domestic corporation M purchases 10 percent of the Corporation B stock from Corporation A and, for the first time, Corporation B meets the ownership requirements of section 902(c)(3)(B) and paragraph (a)(2) of this section. Corporation M uses the calendar year as its taxable year. Corporation B does not distribute any dividends to Corporation M during 1992. For its taxable year ending December 31, 1992, Corporation B has 500u of earnings and profits (after foreign taxes but before taking into account the 200u distribution to Corporation A) and pays 100u of foreign income taxes that is equal to \$100. Pursuant to paragraph (a)(13)(i) of this section, Corporation B's post-1986 undistributed earnings and post-1986 foreign income taxes will include earnings and profits and foreign income taxes attributable to Corporation B's entire 1992 taxable year and all subsequent taxable years beginning before the date these regulations are published as final regulations in the **Federal Register**, as well as later taxable years as of the end of which the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section are met. Thus, the April 1, 1992, dividend to Corporation A will reduce post-1986 undistributed earnings to 300u (500u—200u) under paragraph (a)(9)(i) of this section. The foreign income taxes attributable to the amount distributed as a dividend to Corporation A will not be creditable because Corporation A is not a domestic shareholder. Post-1986 foreign income taxes, however, will be reduced by the amount of foreign taxes attributable to the dividend. Thus, as of the beginning of 1993, Corporation B has \$60 (\$100—[\$100 × 40% (200u/500u)]) of post-1986 foreign income taxes. See paragraphs (a)(8)(i) and (b)(1) of this section.

Example 2. The facts are the same as in *Example 1*, except that Corporation M sells five percent of the Corporation B stock to an unrelated buyer on July 1, 2003, so that Corporation B no longer meets the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section as of that date. Thus, as of December 31, 2003, Corporation B's earnings and profits all consist of pre-1987 accumulated profits, comprising pre-1987 earnings for years beginning prior to January 1, 1987, pre-pooling earnings for taxable years 1987 through 1991, no earnings for 1992 through 2001, formerly pooled earnings for 2002 (comprising Corporation B's post-1986 undistributed earnings for 1992 through 2002), and post-pooling earnings for 2003. Dividends paid by Corporation B to Corporation M at any time during 2003 will be considered paid out of pre-1987

accumulated profits. See paragraphs (a)(10) and (a)(13)(i) of this section. However, Corporation M will be eligible to claim a deemed-paid credit only with respect to dividends received on or before July 1, 2003. See paragraphs (a)(1) and (12) of this section and § 1.902-3(a)(1) and (7).

Example 3. The facts are the same as in *Example 2*, except that Corporation M purchases an additional five percent of the stock of Corporation B on July 1, 2004, so that Corporation B again meets the ownership requirements of section 902(c)(3)(B) and paragraphs (a)(1) through (4) of this section on December 31, 2004. As of the end of 2004, assume Corporation B has 500u of post-1986 undistributed earnings (after foreign taxes but before taking into account distributions during 2004) and \$100 of post-1986 foreign income taxes attributable to 2004, 500u of post-pooling earnings and 100u of pre-1987 foreign income taxes attributable to 2003, and 1500u of formerly pooled earnings and \$250 of pre-1987 foreign income taxes attributable to 2002 (comprising Corporation B's post-1986 undistributed earnings and post-1986 foreign income taxes for 1992 through 2002). Corporation B pays dividends to its shareholders of 500u on March 1, 2004, and 500u on September 1, 2004. The March 1, 2004, dividend is out of Corporation B's post-1986 undistributed earnings in its entirety, and reduces Corporation B's post-1986 undistributed earnings and post-1986 foreign income taxes to zero, even though no shareholder is eligible to claim a credit for deemed-paid taxes. See paragraphs (a)(8)(i) and (b)(1) of this section. The September 1, 2004, dividend is out of 2003 post-pooling earnings and foreign income taxes to zero. Corporation M, which is a 10% domestic shareholder of Corporation B on that date and receives a dividend of 50u, is deemed to have paid 10u of foreign income taxes (50u/500u × 100u) with respect to the dividend. Both the dividend and the deemed-paid taxes are translated into dollars at the spot exchange rate on the dividend date, under the law in effect prior to the effective date of the Tax Reform Act of 1986. See paragraphs (a)(10)(i) and (ii) of this section.

Par. 4. Section 1.904-0 is amended as follows:

1. The entries for § 1.904-4 are amended by:
 - a. Revising the entry for paragraph (b)(2)(iii).
 - b. Removing the entry for paragraph (b)(2)(iv).
 - c. Revising the entries for paragraphs (g) and (g)(1), adding entries for paragraphs (g)(1)(i)–(iii), and revising the entry for paragraph (g)(3)(i)(C).
 - d. Adding entries for paragraphs (g)(3)(i)(C)(1), (g)(3)(i)(C)(2), and (g)(4).
 - e. Adding an entry for paragraph (m).
2. The entries for § 1.904(b)–1 are amended by:
 - a. Revising section heading and the entries for all of paragraphs (a), (b), and (c).
 - b. Adding entries for paragraphs (d), (e), (f), (g), and (h).

3. Revising the entries for all of § 1.904(b)–2.

4. Removing all the entries for §§ 1.904(b)–3 and 1.904(b)–4.

5. Adding entries for § 1.904(j)–1.

The revisions and additions read as follows:

§ 1.904-0 Outline of regulation provisions for section 904.

* * * * *

§ 1.904-4 Separate application of section 904 with respect to certain categories of income.

* * * * *

(b) * * *

(2) * * *

(iii) Example.

* * * * *

(g) Noncontrolled section 902 corporation and non-look-through 10/50 corporation.

(1) Corporate-level accounts and treatment of distributions to shareholders.

(i) Definitions.

(ii) Accounts at foreign corporation level.

(iii) Inclusion at shareholder level.

* * * * *

(3) * * *

(i) * * *

(C) Effect of intervening noncontrolled or less-than-10%-U.S.-owned status.

(1) Pre-2003 decontrolling event.

(2) Pool-terminating event.

* * * * *

(4) Special rule for dividends paid by a 10/50 look-through corporation.

* * * * *

(m) Income treated as allocable to an additional separate category.

* * * * *

§ 1.904(b)–1 Special rules for capital gains and losses.

(a) Capital amounts included in taxable income from sources outside the United States.

(1) Limitation on capital gain from sources outside the United States when the taxpayer has net capital losses from sources within the United States.

(i) In general.

(ii) Allocation of reduction among multiple separate categories or rate groups.

(2) Capital losses from sources outside the United States in the same separate category.

(3) Exclusivity of rules; no reduction by reason of net capital loss from sources outside the United States in a different separate category.

(4) Examples.

(b) Capital gain rate differential.

(1) Application of adjustments only if capital gain rate differential exists.

(2) Determination of whether capital gain rate differential adjustment exists.

(c) Rate differential adjustment of capital gains.

(1) Rate differential adjustment of capital gains in foreign source taxable income.

(2) Rate differential adjustment of capital gains in entire taxable income.

(d) Rate differential adjustment of capital losses from sources outside the United States.

(1) In general.

(2) Determination of which net capital gains are offset by net capital losses from sources outside the United States.

(e) Definitions.

(1) Alternative tax rate.

(2) Capital gain net income.

(3) Net capital gain.

(4) Rate group.

(i) Capital gains.

(ii) Capital losses.

(5) Terms used in sections 1(h), 904(b) or 1222.

(f) Examples.

(g) Coordination with overall foreign loss recapture rules.

(h) Effective date.

§ 1.904(b)–2 Special rules for application of section 904(b) to alternative minimum tax foreign tax credit.

(a) Application of section 904(b)(2)(B) adjustments.

(b) Use of alternative minimum tax rates.

(1) Taxpayers other than corporations.

(2) Corporate taxpayers.

(c) Effective date.

* * * * *

§ 1.904(j)–1 Certain individuals exempt from foreign tax credit limitation.

(a) Election available only if all foreign taxes are creditable foreign taxes.

(b) Coordination with carryover rules.

(1) No carryovers to or from election year.

(2) Carryovers to and from other years determined without regard to election years.

(3) Determination of amount of creditable foreign taxes.

(c) Examples.

Par. 5. Section 1.904–4 is amended as follows:

1. Paragraph (a) is amended by removing the period at the end and adding the language “, or in § 1.904–4(m) (additional separate categories).”

2. The first sentence of paragraph (b)(2)(i) is revised.

3. Paragraph (b)(2)(ii) is revised.

4. Paragraph (b)(2)(iii) is removed.

5. Paragraph (b)(2)(iv) is redesignated as paragraph (b)(2)(iii).

6. The last three sentences of the *Example* in newly designated paragraph

(b)(2)(iii) are revised and three new sentences are added at the end.

7. The paragraph heading for paragraph (g) is revised.

8. Paragraph (g)(1) is redesignated as paragraph (g)(1)(i) and a new heading is added for paragraph (g)(1).

9. Five sentences are added at the end of newly designated paragraph (g)(1)(i).

10. Paragraphs (g)(1)(ii) and (iii) are added.

11. The heading of paragraph (g)(3)(i)(C) is revised and the text to paragraph (g)(3)(i)(C) is added.

12. The text of *Example 2* through *Example 4* is added to paragraph (g)(3)(i)(D).

13. Paragraph (g)(4) is added.

14. The language “and” at the end of paragraph (l)(1)(v) is removed.

15. The period at the end of paragraph (l)(1)(vi) is removed and “; and” is added in its place.

16. Paragraph (l)(1)(vii) is added.

17. Paragraph (m) is added.

The revisions and additions read as follows:

§ 1.904–4 Separate application of section 904 with respect to certain categories of income.

* * * * *

(b) * * *

(2) * * * (i) * * * For rents and royalties paid or accrued more than 60 days after the date these regulations are published as final regulations in the **Federal Register**, passive income does not include any rents or royalties that are derived in the active conduct of a trade or business, regardless of whether such rents or royalties are received from a related or an unrelated person. * * *

(ii) **Exception for certain rents and royalties.** Rents and royalties are considered derived in the active conduct of a trade or business by a United States person or by a controlled foreign corporation (or other entity to which the look-through rules apply) for purposes of section 904 (but not for purposes of section 954) if the requirements of section 954(c)(2)(A) are satisfied by one or more corporations that are members of an affiliated group of corporations (within the meaning of section 1504(a), determined without regard to section 1504(b)(3)) of which the recipient is a member. For purposes of this paragraph (b)(2)(ii), an affiliated group includes only United States corporations and foreign corporations that are controlled foreign corporations in which United States members of the affiliated group own, directly or indirectly, at least 80 percent of the total voting power and value of the stock. For purposes of this paragraph (b)(2)(ii), indirect ownership shall be determined

under section 318 and the regulations under that section.

(iii) * * *

Example. * * * Some of the franchisees are unrelated to S and P. Other franchisees are related to S or P and use the licensed property outside of S's country of incorporation. S does not satisfy, but P does satisfy, the active trade or business requirements of section 954(c)(2)(A) and the regulations thereunder. The royalty income earned by S with regard to both its related and unrelated franchisees is foreign personal holding company income because S does not satisfy the active trade or business requirements of section 954(c)(2)(A) and, in addition, the royalty income from the related franchisees does not qualify for the same country exception of section 954(c)(3). However, all of the royalty income earned by S is general limitation income to S under § 1.904–4(b)(2)(ii) because P, a member of S's affiliated group (as defined therein), satisfies the active trade or business test (which is applied without regard to whether the royalties are paid by a related person). S's royalty income that is taxable to P under subpart F and the royalties paid to P are general limitation income to P under the look-through rules of § 1.904–5(c)(1)(i) and (c)(3), respectively.

* * * * *

(g) *Noncontrolled section 902 corporation and non-look-through 10/50 corporation—*(1) *Corporate-level accounts and treatment of distributions to shareholders—*(i) *Definitions.* * * * Except as otherwise provided, the term “look-through corporation” means a foreign corporation that is subject to the look-through rules of section 904(d)(3) or section 904(d)(4) (as in effect for taxable years beginning after December 31, 2002). The term “non-look-through 10/50 corporation” means any foreign corporation that is not a look-through corporation and with respect to which a domestic corporation meets the stock ownership requirements of section 902(a), or, for purposes of applying the look-through rules described in section 904(d)(3) and § 1.904–5, a domestic corporation meets the requirements of section 902(b). The term “less-than-10%-U.S.-owned foreign corporation” means a foreign corporation that is neither a look-through corporation nor a non-look-through 10/50 corporation. The term “look-through pool” means the post-1986 undistributed earnings of a foreign corporation that are subject to the look-through provisions of section 904(d)(3) or section 904(d)(4) as in effect for taxable years beginning after December 31, 2002. The term “non-look-through pool” means the post-1986 undistributed earnings of a foreign corporation that were accumulated (or treated as accumulated) while the foreign corporation was a non-look-through 10/50 corporation.

(ii) *Accounts at foreign corporation level.* The post-1986 undistributed earnings of a controlled foreign corporation or other look-through corporation may consist of look-through pools (comprising post-1986 undistributed earnings accumulated during periods when the foreign corporation was, or was treated as, a look-through corporation, which may include post-1986 undistributed earnings in one or more non-look-through pools attributable to dividends paid to the look-through corporation by each separate non-look-through 10/50 corporation), as well as one or more non-look-through pools (including post-1986 undistributed earnings accumulated during periods when the foreign corporation was, or was treated as, a non-look-through 10/50 corporation). Similarly, a look-through corporation's pre-pooling annual layers, as defined in § 1.902-1(a)(10)(i), may or may not be subject to the look-through rules, depending on whether the corporation was, or was treated as, a look-through corporation at the time the earnings were accumulated.

(iii) *Inclusion at shareholder level.* A particular dividend recipient will be entitled to look-through treatment with respect to a particular distribution from a controlled foreign corporation only if the recipient is a United States shareholder, as defined in section 951(b) taking into account section 953(c), of the controlled foreign corporation at the time it receives the dividend. Therefore, a dividend distribution from a controlled foreign corporation to a United States shareholder will be characterized under the look-through rules, whereas a dividend distribution to a less-than-10% shareholder of the controlled foreign corporation will be treated as passive income. Similarly, under section 904(d)(1)(E), only a corporate shareholder calculates a separate foreign tax credit limitation for dividends from each noncontrolled section 902 corporation, and the look-through rules of section 904(d)(4) as in effect for taxable years beginning after December 31, 2002, apply only to applicable dividends out of post-2002 earnings of a corporation that is a noncontrolled section 902 corporation with respect to the taxpayer. Therefore, dividends paid to an individual shareholder by a non-look-through 10/50 corporation, or by a controlled foreign corporation out of a non-look-through pool, will be treated as passive income. Similarly, dividends paid to an individual shareholder by a look-through corporation that is not a controlled foreign corporation will be

treated as passive income to such individual, even if the individual owns 10 percent or more of the distributing corporation's stock.

* * * * *

(3) * * *

(i) * * *

(C) *Effect of intervening noncontrolled or less-than-10%-U.S.-owned status—(1) Pre-2003 decontrolling event.* If a controlled foreign corporation becomes a non-look-through 10/50 corporation, for example, by reason of the corporation's issuance of additional stock or the disposition of stock by the corporation's controlling United States shareholders to foreign persons in a taxable year of the controlled foreign corporation beginning before January 1, 2003, (a decontrolling event), and retains that status as of the end of the foreign corporation's taxable year, then earnings and profits that were accumulated before the decontrolling event during periods when the corporation was a controlled foreign corporation will at all times thereafter be treated as earnings and profits accumulated by a non-look-through 10/50 corporation. The corporation's post-1986 undistributed earnings (or deficits in post-1986 undistributed earnings) in each separate category shall be combined into, and constitute the opening balance of, a single non-look-through pool of post-1986 undistributed earnings accumulated in taxable years beginning before January 1, 2003. The corporation's post-1986 foreign income taxes in each separate category shall similarly be combined into a single category of post-1986 foreign income taxes attributable to the non-look-through pool. Distributions of such earnings and profits after the decontrolling event will not be subject to the look-through rules of § 1.904-5, even if the corporation subsequently becomes a controlled foreign corporation or other look-through corporation again. The corporation's pre-1987 accumulated profits will also be ineligible for look-through treatment if accumulated prior to, and distributed after, the decontrolling event. In determining whether the look-through rules apply to earnings and profits maintained at the distributing corporation level, earnings and profits accumulated or distributed in the taxable year in which a decontrolling event occurs shall be considered accumulated or distributed after the decontrolling event, respectively. However, in determining whether a dividend recipient is entitled to look-through treatment with respect to a particular distribution, only the

shareholder's status and ownership of stock at the time it receives the dividend is relevant. See § 1.902-1(a)(1) and paragraph (g)(1)(iii) of this section.

(2) *Pool-terminating event.* If a look-through corporation or a non-look-through 10/50 corporation becomes a less-than-10%-U.S.-owned foreign corporation, for example, by reason of the corporation's issuance of additional stock or the disposition of stock by the corporation's United States shareholders (a pool-terminating event), and retains that status as of the end of the foreign corporation's taxable year, then earnings and profits that were accumulated before the pool-terminating event will at all times thereafter be treated as pre-1987 accumulated profits accumulated by a non-look-through 10/50 corporation in accordance with § 1.902-1(a)(10) and (13). Distributions of such earnings and profits after the pool-terminating event will not be subject to the look-through rules of § 1.904-5, even if the corporation subsequently becomes a look-through corporation again. Earnings and profits accumulated or distributed in the taxable year in which a pool-terminating event occurs shall be considered accumulated or distributed after the pool-terminating event, respectively. However, in determining whether a dividend recipient is entitled to look-through treatment with respect to a particular distribution, only the shareholder's status and ownership of stock at the time it receives the dividend is relevant. See § 1.902-1(a)(1) and paragraph (g)(1)(iii) of this section.

* * * * *

(D) * * *

Example 2. (i) Facts. X, a domestic corporation, owns all of the stock of S, a controlled foreign corporation. On March 1, 2002, S pays a dividend to X. On July 1, 2002, S issues additional shares of stock to Z, a foreign person, in exchange for a capital contribution. The new stock issuance dilutes X's interest in S to 40 percent. Thus, S is a non-look-through 10/50 corporation beginning on July 1, 2002.

(ii) *Result.* The March 1, 2002, dividend to X is treated as a dividend from a non-look-through 10/50 corporation. X is not entitled to look-through treatment on the dividend under paragraph (g)(3)(i)(C) of this section.

Example 3. (i) Facts. X, a domestic corporation, has owned all of the stock of S, a controlled foreign corporation, since S was organized in 1980. Both X and S use the calendar year as the taxable year. On July 1, 2002, X sells 60 percent of the stock of S to Z, a foreign person. On July 1, 2003, X repurchases all of the S stock that it sold to Z in 2002. Thus, S is a controlled foreign corporation for 1980 through June 30, 2002, a non-look-through 10/50 corporation from July 1, 2002, through December 31, 2002, and a look-through corporation from January 1,

2003, forward, as well as a controlled foreign corporation from July 1, 2003, forward.

(ii) *Result.* Pursuant to paragraph (g)(3)(i)(C) of this section, X is entitled to look-through treatment with respect to distributions before January 1, 2002, of S's post-1986 undistributed earnings accumulated through December 31, 2001, and of S's pre-1987 accumulated profits. Distributions after December 31, 2001, of earnings and profits accumulated before January 1, 2003, will be treated as dividends from a non-look-through 10/50 corporation. X is entitled to look-through treatment on distributions of earnings and profits accumulated and distributed after December 31, 2002.

Example 4. (i) Facts. The facts are the same as in *Example 3*, except that X sells 95 percent, rather than 60 percent, of the stock of S to Z. Thus, S is a controlled foreign corporation for 1980 through June 30, 2002, a less-than-10%-U.S.-owned foreign corporation from July 1, 2002, through June 30, 2003, and a controlled foreign corporation beginning on July 1, 2003.

(ii) *Result.* The result is the same as in *Example 3*, except that distributions from S made between July 1, 2002, and June 30, 2003, will be treated as passive income to X because X owns less than 10 percent of the stock of S during that period. Distributions from S to X made between January 1, 2002, and June 30, 2002, will be treated as dividends from a non-look-through 10/50 corporation. Distributions from S to X made after June 30, 2003, out of earnings and profits accumulated prior to January 1, 2003, will be treated as dividends from a non-look-through 10/50 corporation. X is entitled to look-through treatment of distributions after June 30, 2003, out of earnings and profits accumulated after December 31, 2002.

* * * * *

(4) *Special rule for dividends paid by a 10/50 look-through corporation.*
[Reserved]

* * * * *

(l) * * * (1) * * *
(vii) Income that meets the definitions of a separate category described in paragraph (m) of this section and of any other category of separate limitation income described in section 904(d)(1)(A) through (H) will be subject to the separate limitation described in paragraph (m) of this section and will not be treated as general limitation income described in section 904(d)(1)(I).

* * * * *

(m) *Income treated as allocable to an additional separate category.* If section 904(a), (b), and (c) are applied separately to any category of income under the Internal Revenue Code (for example, under section 56(g)(4)(C)(iii)(IV), 245(a)(10), 865(h), 901(j), or 904(g)(10)), that category of income will be treated for all purposes of the Internal Revenue Code and regulations as if it were a separate category listed in section 904(d)(1) and section 904(d)(3)(F)(i).

Par. 6. In § 1.904–5, paragraph (a)(1) is revised to read as follows:

§ 1.904–5 Look-through rules as applied to controlled foreign corporations and other entities.

(a) * * *
(1) The term “separate category” means, as the context requires, any category of income described in section 904(d)(1)(A), (B), (C), (D), (E), (F), (G), (H), or (I) and in § 1.904–4(b), (d), (e), (f), and (g), any category of income described in § 1.904–4(m), or any category of earnings and profits to which income described in such provisions is attributable.

* * * * *

Par. 7. In § 1.904–6, paragraph (a)(1)(ii) is amended by adding two sentences at the end to read as follows:

§ 1.904–6 Allocation and apportionment of taxes.

(a) * * * (1) * * *
(ii) * * * If the taxpayer applies the principles of §§ 1.861–8 through 1.861–14T for purposes of allocating expenses at the level of the taxpayer (or at the level of the qualified business unit, foreign subsidiary, or other entity that paid or accrued the foreign taxes) under this paragraph (a)(1)(ii), such principles shall be applied (for such purposes) in the same manner as the taxpayer applies such principles in determining the income or earnings and profits for United States tax purposes of the taxpayer (or of the qualified business unit, foreign subsidiary, or other entity that paid or accrued the foreign taxes, as the case may be). For example, a taxpayer must use the modified gross income method under § 1.861–9T when applying the principles of that section for purposes of this paragraph (a)(1)(ii) to determine the amount of a controlled foreign corporation's income, in each separate category, that is taxed by a foreign country, if the taxpayer applies the modified gross income method under § 1.861–9T(f)(3) when applying § 1.861–9T to determine the income and earnings and profits of the controlled foreign corporation for United States tax purposes.

* * * * *

Par. 8. Section 1.904(b)–1 is revised to read as follows:

§ 1.904(b)–1 Special rules for capital gains and losses.

(a) *Capital amounts included in taxable income from sources outside the United States—*(1) *Limitation on capital gain from sources outside the United States when the taxpayer has net capital losses from sources within the United States—*(i) *In general.* Except as

otherwise provided in this section, for purposes of section 904 and this section, taxable income from sources outside the United States (in all of the taxpayer's separate categories in the aggregate) shall include capital gain net income from sources outside the United States (determined by considering all of the capital gain and loss items in all of the taxpayer's separate categories in the aggregate) only to the extent of capital gain net income from all sources. Similarly, except as otherwise provided in this section, for purposes of section 904 and this section, net capital gain from sources outside the United States (determined by considering all of the capital gain and loss items in all of the taxpayer's separate categories in the aggregate) shall not exceed net capital gain from all sources.

(ii) *Allocation of reduction among multiple separate categories or rate groups.* If capital gain net income (or net capital gain) from sources outside the United States exceeds capital gain net income (or net capital gain), and the taxpayer has capital gain net income (or net capital gain) from sources outside the United States in two or more separate categories or in two or more rate groups, such excess must be apportioned on a pro rata basis as a reduction to each such separate category, and then within each separate category, on a pro rata basis among rate groups. For purposes of the preceding sentence, pro rata means based on the relative amounts of the capital gain net income (or net capital gain) from sources outside the United States in each separate category, or in each rate group within a separate category.

(2) *Capital losses from sources outside the United States in the same separate category.* Except as otherwise provided in paragraph (d) of this section, taxable income from sources outside the United States in each separate category shall be reduced by any capital loss that is allocable or apportionable to sources outside the United States in such separate category to the extent such loss is allowable in determining taxable income for the taxable year (taking into account losses allowable under section 1211(b)).

(3) *Exclusivity of rules; no reduction by reason of net capital losses from sources outside the United States in a different separate category.* Capital gains from sources outside the United States in any separate category shall be limited by reason of section 904(b)(2)(A) and the comparable limitation of section 904(b)(2)(B)(i) only to the extent provided in paragraph (a)(1) of this section (relating to limitation on capital gain from sources outside the United

States when taxpayer has net capital losses from sources within the United States) and paragraph (a)(2) of this section (relating to capital losses from sources outside the United States in the same separate category).

(4) *Examples.* The following examples illustrate the application of this paragraph (a). The examples are as follows:

Example 1. Taxpayer A, a corporation, has a general limitation category capital loss of \$3,000 from sources outside the United States, a passive category capital gain of \$3,000 from sources outside the United States, and a capital loss of \$2,000 from sources within the United States. A has no capital gain net income from sources outside the United States (in the aggregate, from all separate categories), because the \$3,000 passive capital gain less the \$3,000 general limitation capital loss yields a net of zero. From all sources, A also has no capital gain net income. (The resulting \$2,000 net capital loss is not currently allowable under section 1211(a) because A is a corporation.) Because A's capital gain net income from sources outside the United States does not exceed A's capital gain net income from all sources, paragraph (a)(1) of this section does not require any reduction of A's passive category capital gain.

Example 2. Taxpayer B, a corporation, has \$500 of capital gain net income from sources outside the United States, of which \$300 is in the general limitation category and \$200 is in the passive category. B's capital gain net income from sources outside the United States is \$500 (\$300 + \$200). Because B also incurs a capital loss of \$100 from sources within the United States, B's capital gain net income (from all sources) is \$400 (\$300 + \$200—\$100). Pursuant to paragraph (a)(1)(B) of this section, the \$100 excess of capital gain net income from sources outside the United States over capital gain net income from all sources (\$500—\$400) must be apportioned, as a reduction, three-fifths (\$300/\$500 of \$100, or \$60) to the general limitation category and two-fifths (\$200/\$500 of \$100, or \$40) to the passive category. Therefore, for purposes of section 904, the general limitation category includes \$240 (\$300—\$60) of capital gain net income from sources outside the United States and the passive category includes \$160 (\$200—\$40) of capital gain net income from sources outside the United States.

Example 3. Taxpayer C, a corporation, has a \$10,000 capital loss from sources outside the United States in the general limitation category, a \$4,000 capital gain from sources outside the United States in the passive category, and a \$2,000 capital gain from sources within the United States. C's capital gain net income from sources outside the United States is zero, since losses exceed gains. C's capital gain net income from all sources is also zero. C's capital gain net income from sources outside the United States does not exceed its capital gain net income from all sources, and therefore paragraph (a)(1) of this section does not require any reduction of C's passive category capital gain. For purposes of section 904, C's

passive category includes \$4,000 of capital gain net income. C's general limitation category includes a capital loss of \$6,000 because only \$6,000 of capital loss is allowable as a deduction in the current year. The entire \$4,000 of capital loss in excess of the \$6,000 of capital loss that offsets capital gain in the taxable year is carried back or forward under section 1212(a), and none of such \$4,000 is taken into account under section 904(a) or (b) for the current taxable year.

(b) *Capital gain rate differential—(1) Application of adjustments only if capital gain rate differential exists.* Section 904(b)(2)(B) and paragraphs (c) and (d) of this section apply only for taxable years in which the taxpayer has a capital gain rate differential.

(2) *Determination of whether capital gain rate differential exists.* For purposes of section 904(b) and this section, a capital gain rate differential is considered to exist for the taxable year only if the taxpayer has a net capital gain for the taxable year and—

(i) In the case of a taxpayer other than a corporation, tax is imposed at a reduced rate under section 1(h) for the taxable year; or

(ii) In the case of a corporation, tax is imposed under section 1201(a) on the taxpayer at a rate less than any rate of tax imposed on the taxpayer by section 11, 511, or 831(a) or (b), whichever applies (determined without regard to the last sentence of section 11(b)(1)), for the taxable year.

(c) *Rate differential adjustment of capital gains—(1) Rate differential adjustment of capital gains in foreign source taxable income.* In determining taxable income from sources outside the United States for purposes of section 904 and this section, capital gain net income from sources outside the United States in each separate category, after any reduction pursuant to paragraph (a) of this section, shall be reduced by the sum of the rate differential portions (as defined in section 904(b)(3)(E)) of each rate group of net capital gain from sources outside the United States in such separate category.

(2) *Rate differential adjustment of capital gains in entire taxable income.* For purposes of section 904 and this section, the entire taxable income shall include gains from the sale or exchange of capital assets only to the extent of capital gain net income reduced by the sum of the rate differential portions (as defined in section 904(b)(3)(E)) of each rate group of net capital gain.

(d) *Rate differential adjustment of capital losses from sources outside the United States—(1) In general.* In determining taxable income from sources outside the United States for

purposes of section 904 and this section, any net capital loss from sources outside the United States included in a separate category pursuant to paragraph (a) of this section shall be reduced by the sum of the rate differential portion of the net capital gains (from the same rate group in other separate categories, from other rate groups in the same or other separate categories, or from sources within the United States) that are offset by such net capital loss in determining the taxpayer's entire taxable income.

(2) *Determination of which net capital gains are offset by net capital losses from sources outside the United States.* For purposes of paragraph (d)(1) of this section, in order to determine which net capital gains (from any rate group) are offset by net capital losses from sources outside the United States, the following rules shall apply in the following order:

(i) Capital losses from sources outside the United States shall first be netted against capital gains from sources outside the United States in the same rate group and the same separate category as the foreign source capital losses.

(ii) Net capital losses from each rate group from sources outside the United States shall be netted against net capital gains from sources outside the United States from the same rate group in other separate categories, ratably to the extent that net capital gains and losses in a particular rate group occur in two or more separate categories.

(iii) Capital losses from sources within the United States shall be netted against capital gains from sources within the United States in the same rate group.

(iv) The net foreign capital losses from each rate group, as determined under paragraph (d)(2)(ii) of this section, shall be netted against the taxpayer's remaining net capital gains from sources within and outside the United States in the following order, and without regard to any net capital losses, from any rate group, from sources within the United States—

(A) First against net capital gains from sources within the United States in the same rate group;

(B) Next, against net capital gains in other rate groups, in the order in which capital losses offset capital gains for purposes of determining the taxpayer's taxable income and without regard to whether such net capital gains derive from sources within or outside the United States, as follows:

(1) A short-term capital loss (including any short-term capital loss carryover) is used first to offset short-term capital gain otherwise taxable at ordinary income rates. Any remaining

net short-term capital loss is used first to offset any net long-term gain in the 28 percent rate group, then to offset net long-term gain in the 25 percent rate group, and finally to offset net long-term gain in the 20 percent rate group.

(2) A net capital loss in the 28 percent rate group is used first to offset net capital gain in the 25 percent rate group, and then to offset net capital gain in the 20 percent rate group.

(3) A net capital loss in the 20 percent rate group is used first to offset net capital gain in the 28 percent rate group, and then to offset net capital gain in the 25 percent rate group.

(v) The net capital losses from sources outside the United States in any rate group, to the extent netted against net capital gains in any other separate category under paragraph (d)(2)(ii) of this section or against net capital gains in any other rate group under paragraph (d)(2)(iv) of this section, shall be treated as coming pro rata from each separate category that contains net capital losses from sources outside the United States in that rate group. For example, assume that the taxpayer has \$20 of net capital losses in the 20 percent rate group in the passive category and \$40 of net capital losses in the 20 percent rate group in the general limitation category, both from sources outside the United States. Further assume that \$50 of the total \$60 net capital losses from sources outside the United States are netted against net capital gains in the 28 percent rate group (from other separate categories or from sources within the United States). One-third of the \$50 of such capital losses would be treated as coming from the passive category, and two-thirds of such \$50 would be treated as coming from the general limitation category.

(vi) The determination of which capital gains are offset by capital losses from sources outside the United States under this paragraph is made solely in order to determine the appropriate rate-differential-based adjustments to such capital losses under this section and section 904(b), and does not change the source, allocation, or separate category of any such capital gain or loss for purposes of computing taxable income from sources within or outside the United States or for any other purpose.

(e) *Definitions.* For purposes of section 904(b) and this section, the following definitions apply:

(1) *Alternative tax rate.* The term *alternative tax rate* means, with respect to any rate group, the rate applicable to that rate group under section 1(h) (for taxpayers other than corporations) or 1201(a) (for corporations). For example, the alternative tax rate for unrecaptured section 1250 gain is 25 percent.

(2) *Capital gain net income.* The term *capital gain net income* means the excess of the gains from the sales or exchanges of capital assets over the losses from such sales or exchanges. Such term shall include net section 1231 gain, but shall not include gains or losses from the sale or exchange of capital assets to the extent that such gains are not treated as capital gains. In determining capital gain net income, gains and losses which are not from the sale or exchange of capital assets but which are treated as capital gains and losses under the Internal Revenue Code are included.

(3) *Net capital gain.* The term *net capital gain* means the excess of the net long-term capital gain (including net section 1231 gain) for the taxable year over the net short-term capital loss for such year, but shall not include gains or losses from the sale or exchange of capital assets to the extent that such gains are not treated as capital gains. In determining net capital gain, gains and losses which are not from the sale or exchange of capital assets but which are treated as capital gains and losses under the Internal Revenue Code are included.

(4) *Rate group.* For purposes of this section—

(i) *Capital gains.* With respect to capital gains, the term *rate group* means the amounts subject to a particular rate of tax under section 1(h). For example, the 20 percent rate group of capital gain net income from sources outside the United States consists of the capital gain net income from sources outside the United States that is subject to tax at a rate of 20 percent under section 1(h).

(ii) *Capital losses.* With respect to capital losses, the rate group shall be determined as if the sale or exchange that produced the capital loss had instead produced a capital gain. For example, if the sale of an asset held for more than one year yields a capital loss, but any gain generated by the sale would have been subject to tax at a rate of 20 percent under section 1(h), the capital loss is allocated to the 20 percent rate group for purposes of this section.

(5) *Terms used in sections 1(h), 904(b) or 1222.* For purposes of this section, any term used in this section and also used in section 1(h), section 904(b) or section 1222 shall have the same meaning given such term by section 1(h), 904(b) or 1222, respectively, except as otherwise provided in this section.

(f) *Examples.* The following examples illustrate the provisions of this section. In these examples, the adjustment for the rate differential portion is shown as a fraction, the numerator of which is the alternative tax rate percentage and the denominator of which is 39.6 percent

(the current highest applicable tax rate for individuals under section 1). All of the examples assume that all capital gains and losses are long-term capital gains and losses. (Therefore, in these examples, capital gain net income equals net capital gain, and for convenience both are referred to in the examples as net capital gain in calculating the rate differential adjustments). In addition, all dollar amounts in the examples are abbreviated from amounts in the thousands (*e.g.*, \$50 represents \$50,000). The examples are as follows:

Example 1. (i) A, an individual, has foreign source items only in the passive category for the taxable year. A has \$1,000 of capital gains from sources outside the United States, which would be taxed at a rate of 20 percent under section 1(h). A has \$700 of capital losses from sources outside the United States, which resulted from the sale of capital assets held for more than one year. If the sale had resulted in gain rather than loss, the gain would have been taxed at a rate of 20 percent under section 1(h). For the same taxable year, A has \$800 of capital gains from sources within the United States that are taxed at a rate of 28 percent under section 1(h). A also has \$100 of capital losses from sources within the United States. If the sale or exchange generating such capital losses had instead yielded a capital gain, such gain would have been subject to tax at a rate of 20 percent under section 1(h). A also has \$500 of ordinary income from sources within the United States.

(ii) A's items of ordinary income, capital gain and capital loss for the taxable year are summarized in the following table: foreign source:

	U.S. source	Foreign source: passive
20% rate group	(\$100)	\$1,000 (\$700)
25% rate group		
28% rate group	800	
Ordinary income	500	

(iii) A's capital gain net income from sources outside the United States (\$300) does not exceed A's capital gain net income from all sources (\$1,000). Therefore, paragraph (a)(1) of this section does not require any reduction of A's capital gain net income in the passive category.

(iv) In computing A's taxable income from sources outside the United States in the numerator of the section 904(a) foreign tax credit limitation fraction for the passive category, capital gains and losses from sources outside the United States are netted within rate groups and within separate categories. See paragraphs (a)(2), (c)(1), and (d)(1) of this section. The \$1,000 of capital gain less the \$700 of capital loss yields \$300 of net capital gain in the 20 percent rate group in the passive category. A must adjust the resulting net capital gain in the passive category as required under section 904(b)(2)(B)(i) and paragraph (c)(1) of this

section, using 20 percent as the alternative tax rate, as follows: \$300 (20%/39.6%).

(v) In computing A's entire taxable income in the denominator of the section 904(a) foreign tax credit limitation fraction, A must combine the \$300 net capital gain from sources outside the United States and the

\$100 net capital loss from sources within the United States in the same rate group (20 percent). A must adjust the resulting \$200 (\$300 - \$100) of net capital gain in the 20 percent rate group as required under section 904(b)(2)(B)(ii) and paragraph (c)(2) of this section, using 20 percent as the alternative

tax rate, as follows: \$200 (20%/39.6%). A must also adjust the \$800 of net capital gain in the 28 percent rate group, using 28 percent as the alternative tax rate, as follows: \$800 (28%/39.6%).

(vi) A's passive category foreign tax credit limitation is computed as follows:

$$\frac{\$300 (20\%/39.6\%)}{\$500 + \$200 (20\%/39.6\%) + \$800 (28\%/39.6\%)}$$

Example 2. (i) X, an individual, has the following items of ordinary income, capital gain, and capital loss for the taxable year:

	U.S. source	Foreign source:	
		General	Passive
20% rate group	\$300	(\$500)	\$100
25% rate group	200		
28% rate group	500	(300)	
Ordinary income	1,000	500	500

(ii) X's capital gain net income from sources outside the United States in the aggregate (zero, since losses exceed gains) does not exceed X's capital gain net income from all sources (\$300). Therefore, paragraph (a)(1) of this section does not require any reduction of X's capital gain net income in the passive category.

(iii) In computing X's taxable income from sources outside the United States in the numerators of the section 904(a) foreign tax credit limitation fractions for the passive and general limitation categories, X must adjust capital gain net income and net capital losses as provided in section 904(b)(2)(B)(i) and (iii) and paragraphs (c)(1) and (d)(1) of this section.

(A) First, capital gains and losses from sources outside the United States are netted within rate groups and within separate categories. There are no such amounts to be netted in this case.

(B) Because X has net capital losses in the general limitation category, under paragraph (d)(2)(ii) of this section X's net capital losses from sources outside the United States in each rate group are netted against net capital gains from sources outside the United States in other separate categories in the same rate group. Thus, \$100 of the \$500 net capital loss in the 20 percent rate group in the general limitation category offsets \$100 of net capital gain in the 20 percent rate group in the passive category. The \$100 net capital gain

remains in the passive category and is adjusted under paragraph (c)(1) of this section as follows: \$100(20%/39.6%). The \$100 net capital loss remains in the general limitation category and is adjusted under paragraph (d)(1) of this section as follows: \$100(20%/39.6%).

(C) Next, under paragraph (d)(2)(iv)(A) of this section, X's net capital losses from sources outside the United States in any rate group and in any separate category are netted against net capital gains in the same rate group from sources within the United States. Thus, \$300 of the \$500 net capital loss in the 20 percent rate group in the general limitation category offsets \$300 of net capital gain in the 20 percent rate group from sources within the United States. The \$300 of net capital loss remains in the general limitation category and is adjusted under paragraph (d)(1) of this section as follows: \$300(20%/39.6%). Similarly, the \$300 of net capital loss in the 28 percent rate group in the general limitation category offsets \$300 of net capital gain in the 28 percent rate group from sources within the United States. The \$300 net capital loss remains in the general limitation category and is adjusted under paragraph (d)(1) of this section as follows: \$300(28%/39.6%).

(D) Next, under paragraph (d)(2)(iv)(B) of this section, the remaining net capital losses in a rate group are netted against net capital gains from other rate groups from sources

within and outside the United States. The remaining \$100 of the \$500 net capital loss in the 20 percent rate group in the general limitation category offsets \$100 of the remaining net capital gain in the 28 percent rate group from sources within the United States. The \$100 of net capital loss remains in the general limitation category and is adjusted under paragraph (d)(1) of this section as follows: \$100(28%/39.6%).

(iv) In computing X's entire taxable income in the denominator of the section 904(a) foreign tax credit limitation fractions, X must adjust capital gain net income by netting all of X's capital gains and losses, from sources within and outside the United States, and adjusting any remaining net capital gains, based on rate category, under section 904(b)(2)(B)(ii) and paragraph (c)(2) of this section. X must also include foreign source ordinary income in the numerators, and worldwide ordinary income in the denominator, of the foreign tax credit limitation fractions. The denominator of X's foreign tax credit limitation fractions reflects \$2,000 of worldwide ordinary income, \$100 of U.S.-source net capital gain taxed at the 28% rate and adjusted as follows: \$100(28%/39.6%), and \$200 of U.S.-source net capital gain taxed at the 25% rate and adjusted as follows: \$200(25%/39.6%).

(v) X's general limitation foreign tax credit limitation is computed as follows:

$$\frac{\$500 - \$100 (20\%/39.6\%) - \$300 (20\%/39.6\%) - \$300 (28\%/39.6\%) - \$100 (28\%/39.6\%)}{\$1,000 + \$500 + \$500 + \$100 (28\%/39.6\%) + \$200 (25\%/39.6\%)}$$

(vi) X's passive category foreign tax credit limitation is computed as follows:

$$\begin{array}{c} \$500 + \$100 (20\%/39.6\%) \\ \$1,000 + \$500 + \$500 + \$100 (28\%/39.6\%) + \$200 (25\%/39.6\%) \end{array}$$

Example 3. (i) Y, an individual, has the following items of ordinary income, capital gain, and capital loss for the taxable year:

	U.S. source	Foreign source	
		General	Passive
20% rate group	\$300	(\$720)	(\$80)
25% rate group	200		
28% rate group	500	(150)	50
Ordinary income	1,000	1,000	500

(ii) Y's capital gain net income from sources outside the United States (zero, since losses exceed gains) does not exceed Y's capital gain net income from all sources (\$100). Therefore, paragraph (a)(1) of this section does not require any adjustment.

(iii) In computing Y's taxable income from sources outside the United States in the numerators of the section 904(a) foreign tax credit limitation fractions for the passive and general limitation categories, Y must adjust capital gain net income and net capital losses as provided in section 904(b)(2)(B)(i) and (iii) and paragraphs (c)(1) and (d)(1) of this section. Since Y has no capital gain net income in any separate category, the only adjustments are those required under section 904(b)(2)(B)(iii) and paragraph (d)(1) of this section.

(A) Under paragraph (d)(2)(ii) of this section, \$50 of Y's \$150 net capital loss in the 28 percent rate group in the general limitation category offsets \$50 of net capital gain in the 28 percent rate group in the passive category. The \$50 of net capital loss remains in the general limitation category and is adjusted as follows: $\$50(28\%/39.6\%)$. The \$50 of net capital gain remains in the passive category and is adjusted as follows: $\$50(28\%/39.6\%)$.

(B) Under paragraph (d)(2)(iv)(A) of this section, the remaining \$100 of net capital loss in the 28 percent rate group in the general limitation category offsets \$100 of net

capital gain in the 28 percent rate group from sources within the United States. The \$100 of net capital loss remains in the general limitation category and is adjusted as follows: $\$100(28\%/39.6\%)$.

(C) Under paragraph (d)(2)(iv)(A) of this section, the \$300 of net capital gain in the 20 percent rate group from sources within the United States is reduced proportionately by the net capital losses in the 20 percent rate group in the passive and general limitation categories. The proportionate amount of the \$720 net capital loss remains in the general limitation category, adjusted as follows: $\$300(\$720/\$800)(20\%/39.6\%)$. The proportionate amount of the \$80 net capital loss remains in the passive category, adjusted as follows: $\$300(\$80/\$800)(20\%/39.6\%)$.

(D) Of the remaining \$500 of net capital loss in the 20 percent rate group (in the general limitation and passive categories), \$400 offsets the remaining \$400 of net capital gain in the 28 percent rate group from sources within the United States under paragraph (d)(2)(iv)(B)(3) of this section. The proportionate amount of the \$720 net capital loss remains in the general limitation category, adjusted as follows: $\$400(\$720/\$800)(28\%/39.6\%)$. The proportionate amount of the \$80 net capital loss remains in the passive category, adjusted as follows: $\$400(\$80/\$800)(28\%/39.6\%)$.

(E) Under paragraph (d)(2)(iv)(B)(3) of this section, the remaining \$100 of net capital

loss in the 20 percent rate group (in the general limitation and passive limitation categories) offsets \$100 of net capital gain in the 25 percent rate group from sources within the United States. The proportionate amount of the \$720 net capital loss remains in the general limitation category, adjusted as follows: $\$100(\$720/\$800)(25\%/39.6\%)$. The proportionate amount of the \$80 net capital loss remains in the passive category, adjusted as follows: $\$100(\$80/\$800)(25\%/39.6\%)$.

(iv) In computing Y's entire taxable income in the denominator of the section 904(a) foreign tax credit limitation fractions, Y must adjust capital gain net income by netting all of Y's capital gains and losses, from sources within and outside the United States, and adjusting any remaining net capital gains, based on rate category, under section 904(b)(2)(B)(ii) and paragraph (c)(2) of this section. Y must also include foreign source ordinary income in the numerators, and worldwide ordinary income in the denominator, of the foreign tax credit limitation fractions. The denominator of Y's foreign tax credit limitation fractions reflects \$2,500 of worldwide ordinary income and \$100 of U.S.-source net capital gain taxed at the 25% rate and adjusted as follows: $\$100(25\%/39.6\%)$.

(v) Y's general limitation foreign tax credit limitation is computed as follows:

$$\begin{array}{c} \$1,000 - \$50 (28\%/39.6\%) - \$100 (28\%/39.6\%) - \$300 (\$720/\$800) (20\%/39.6\%) - \\ \$400 (\$720/\$800) (28\%/39.6\%) - \$100 (\$720/\$800) (25\%/39.6\%) \\ \hline \$1,000 + \$1,000 + \$500 + \$100 (25\%/39.6\%) \end{array}$$

(vi) Y's passive category foreign tax credit limitation is computed as follows:

$$\begin{array}{c} \$500 + \$50 (28\%/39.6\%) - \$300 (\$80/\$800) (20\%/39.6\%) - \$400 (\$80/\$800) (28\%/39.6\%) - \$100 (\$80/\$800) (25\%/39.6\%) \\ \hline \$1,000 + \$1,000 + \$500 + \$100 (25\%/39.6\%) \end{array}$$

(g) *Coordination with overall foreign loss recapture rules.* Section 904(b) and this section shall apply before the provisions of section 904(f). Therefore, the amount of a taxpayer's separate

limitation income or loss in each separate category, the amount of overall foreign loss, and the amount of any additions to or recapture of separate limitation loss or overall foreign loss

accounts pursuant to section 904(f) shall be determined after applying section 904(b) and this section to adjust capital gains and losses in each separate category.

(h) *Effective date.* This section shall apply to taxable years beginning after the date this regulation is published in the **Federal Register** as a final regulation.

Par. 9. Section 1.904(b)–2 is revised to read as follows: § 1.904(b)–2 Special rules for application of section 904(b) to alternative minimum tax foreign tax credit.

(a) *Application of section 904(b)(2)(B) adjustments.* Section 904(b)(2)(B) shall apply for purposes of determining the alternative minimum tax foreign tax credit under section 59 (regardless of whether or not the taxpayer has made an election under section 59(a)(4)).

(b) *Use of alternative minimum tax rates—(1) Taxpayers other than corporations.* In the case of a taxpayer other than a corporation, for purposes of determining the alternative minimum tax foreign tax credit under section 59—

(i) Section 904(b)(3)(D)(i) shall be applied by substituting “section 55(b)(3)” for “subsection (h) of section 1”;

(ii) Section 904(b)(3)(E)(ii)(I) shall be applied by substituting “section 55(b)(1)(A)(i)” for “subsection (a), (b), (c), (d), or (e) of section 1 (whichever applies)”;

(iii) Section 904(b)(3)(E)(iii)(I) shall be applied by substituting “the alternative rate of tax determined under section 55(b)(3)” for “the alternative rate of tax determined under section 1(h)”.

(2) *Corporate taxpayers.* In the case of a corporation, for purposes of determining the alternative minimum tax foreign tax credit under section 59, section 904(b)(3)(E)(ii)(II) shall be applied by substituting “section 55(b)(1)(B)” for “section 11(b)”.

(c) *Effective date.* This section shall apply to taxable years beginning after the date this section is published as a final regulation in the **Federal Register**.

§§ 1.904(b)–3 and 1.904(b)–4 [Removed]

Par. 10. Sections 1.904(b)–3 and 1.904(b)–4 are removed.

Par. 11. Section 1.904(j)–1 is added to read as follows:

§ 1.904(j)–1 Certain individuals exempt from foreign tax credit limitation.

(a) *Election available only if all foreign taxes are creditable foreign taxes.* A taxpayer may elect to apply section 904(j) for a taxable year only if all of the taxes for which a credit is allowable to the taxpayer under section 901 for the taxable year (without regard to carryovers) are creditable foreign taxes (as defined in section 904(j)(3)(B)).

(b) *Coordination with carryover rules—(1) No carryovers to or from election year.* If the taxpayer elects to

apply section 904(j) for any taxable year, then no taxes paid or accrued by the taxpayer during such taxable year may be deemed paid or accrued under section 904(c) in any other taxable year, and no taxes paid or accrued in any other taxable year may be deemed paid or accrued under section 904(c) in such taxable year.

(2) *Carryovers to and from other years determined without regard to election years.* The amount of the foreign taxes paid or accrued, and the amount of the foreign source taxable income, in any year for which the taxpayer elects to apply section 904(j) shall not be taken into account in determining the amount of any carryover to or from any other taxable year. However, an election to apply section 904(j) to any year does not extend the number of taxable years to which unused foreign taxes may be carried under section 904(c) and § 1.904–2(b). Therefore, in determining the number of such carryover years, the taxpayer must take into account years to which a section 904(j) election applies.

(3) *Determination of amount of creditable foreign taxes.* Otherwise allowable carryovers of foreign tax credits from other taxable years shall not be taken into account in determining whether the amount of creditable foreign taxes paid or accrued by an individual during a taxable year exceeds \$300 (\$600 in the case of a joint return) for purposes of section 904(j)(2)(B).

(c) *Examples.* The following examples illustrate the provisions of this section:

Example 1. In 2001, X, a single individual using the cash basis method of accounting for income and foreign tax credits, pays \$100 of foreign taxes with respect to general limitation income that was earned and included in income for United States tax purposes in 2000. The foreign taxes would be creditable under section 901 but are not shown on a payee statement furnished to X. X's only income for 2001 from sources outside the United States is qualified passive income, with respect to which X pays \$200 of creditable foreign taxes shown on a payee statement. X may not elect to apply section 904(j) for 2001 because some of X's foreign taxes are not creditable foreign taxes within the meaning of section 904(j)(3)(B).

Example 2. (i) In 2002, A, a single individual using the cash basis method of accounting for income and foreign tax credits, pays creditable foreign taxes of \$250 attributable to passive income. Under section 904(c), A may also carry forward to 2002 \$100 of unused foreign taxes paid in 1998 with respect to passive income, \$300 of unused foreign taxes paid in 1998 with respect to general limitation income, \$400 of unused foreign taxes paid in 1999 with respect to passive income, and \$200 of unused foreign taxes paid in 1999 with respect to general limitation income. In 2002,

A's only foreign source income is passive income described in section 904(j)(3)(A)(i), and this income is reported to A on a payee statement (within the meaning of section 6724(d)(2)). If A elects to apply section 904(j) for the 2002 taxable year, the unused foreign taxes paid in 1998 and 1999 are not deemed paid in 2002, and A therefore cannot claim a foreign tax credit for those taxes in 2002.

(ii) In 2003, A again is eligible for and elects the application of section 904(j). The carryforwards from 1998 expire in 2003. The carryforward period established under section 904(c) is not extended by A's election under section 904(j). In 2004, A does not elect the application of section 904(j). The \$600 of unused foreign taxes paid in 1999 on passive and general limitation income are deemed paid in 2004, under section 904(c), without any adjustment for any portion of those taxes that might have been used as a foreign tax credit in 2002 or 2003 if section 904(j) had not prevented A from carrying over taxes to those years.

(d) *Effective date.* Section 1.904(j)–1 applies to taxable years beginning after December 31, 1997.

Par. 12. Section 1.954–2 is amended by:

1. Revising paragraph (b)(2)(iv), *Example 2.*

2. Removing paragraph (b)(2)(iv), *Example 3.*

The revision reads as follows:

§ 1.954–2 Foreign personal holding company income.

* * * * *

(b) * * *

(2) * * *

(iv) * * *

Example 2. (i) DS, a domestic corporation, wholly owns two controlled foreign corporations organized in Country A, CFC1 and CFC2. CFC1 purchases from DS property that DS manufactures in the United States. CFC1 uses the purchased property as a component part of property that CFC1 manufactures in Country A within the meaning of § 1.954–3(a)(4). CFC2 provides loans described in section 864(d)(6) to unrelated persons in Country A for the purchase of the property that CFC1 manufactures in Country A.

(ii) The interest accrued from the loans by CFC2 is not export financing interest as defined in section 904(d)(2)(G) because the property sold by CFC1 is not manufactured in the United States under § 1.927(a)–1T(c). No portion of the interest is export financing interest as defined in this paragraph (b)(2). The full amount of the interest is, therefore, included in foreign personal holding company income under paragraph (b)(1)(ii) of this section.

* * * * *

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

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BILLING CODE 4830–01–P

DEPARTMENT OF THE INTERIOR**Office of Surface Mining Reclamation and Enforcement****30 CFR Part 948****[WV-088-FOR]****West Virginia Regulatory Program**

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM), Interior.

ACTION: Proposed rule; public comment period and opportunity for public hearing.

SUMMARY: OSM is announcing receipt of a proposed amendment to the West Virginia regulatory program under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The program amendment consists of a written response to the required program amendments codified in the Federal regulations. The amendment is intended to render the West Virginia program no less effective than the Federal requirements.

DATES: If you submit written comments, they must be received on or before 4:00 p.m. (local time), on February 2, 2001. If requested, a public hearing on the proposed amendments will be held at 1:00 p.m. (local time), on January 29, 2001. Requests to speak at the hearing must be received by 4:00 p.m. (local time), on January 18, 2001.

ADDRESSES: Mail or hand-deliver your written comments and requests to speak at the hearing to Mr. Roger W. Calhoun, Director, Charleston Field Office at the address listed below.

You may review copies of the West Virginia program, the proposed amendment, a listing of any scheduled hearings, and all written comments received in response to this document at the addresses below during normal business hours, Monday through Friday, excluding holidays. You may receive one free copy of the proposed amendment by contacting OSM's Charleston Field Office.

Mr. Roger W. Calhoun, Director, Charleston Field Office, Office of Surface Mining Reclamation and Enforcement, 1027 Virginia Street, East, Charleston, West Virginia 25301. Telephone: (304) 347-7158. E-mail: chfo@osmre.gov.

West Virginia Division of Environmental Protection, 10 McJunkin Road, Nitro, West Virginia 25143, Telephone: (304) 759-0515. The proposed amendment will be posted at the Division's Internet page: <http://www.dep.state.wv.us>.

In addition, you may review copies of the proposed amendment during regular business hours at the following locations:

Office of Surface Mining Reclamation and Enforcement, Morgantown Area Office, 75 High Street, Room 229, P.O. Box 886, Morgantown, West Virginia 26507, Telephone: (304) 291-4004.

Office of Surface Mining Reclamation and Enforcement, Beckley Area Office, 323 Harper Park Drive, Suite 3, Beckley, West Virginia 25801, Telephone: (304) 255-5265.

FOR FURTHER INFORMATION CONTACT: Mr. Roger W. Calhoun, Director, Charleston Field Office; Telephone: (304) 347-7158.

SUPPLEMENTARY INFORMATION:**I. Background on the West Virginia Program**

On January 21, 1981, the Secretary of the Interior conditionally approved the West Virginia program. You can find background information on the West Virginia program, including the Secretary's findings, the disposition of comments, and the conditions of approval in the January 21, 1981, **Federal Register** (46 FR 5915-5956). You can find later actions concerning the conditions of approval and program amendments at 30 CFR 948.10, 948.12, 948.13, 948.15, and 948.16.

II. Discussion of the Proposed Amendment

By letter dated November 30, 2000 (Administrative Record Number WV-1189), the WVDEP submitted an amendment to its program. The amendment consists of the State's written response to several required regulatory program amendments codified in the Federal regulations at 30 CFR 948.16.

In its letter to OSM, the West Virginia Division of Environmental Protection (WVDEP) stated that the amendment submittal is a revision of the WVDEP's previous letter to OSM dated August 3, 2000, concerning the required amendments codified at 30 CFR 948.16 (Administrative Record Number 1172). The August 3, 2000, letter contains several attachments that are relevant to the November submittal. The WVDEP stated in its November 30, 2000, letter that the required program amendments codified at 30 CFR 948.16(jjj), (kkk), and (lll) will be addressed separately. The State's amendment also does not address the required program amendments that we added to the West Virginia program in a final rule notice published in the **Federal Register** on

August 18, 2000 (65 FR 50409, 50430-50431).

We note that the State's responses to required amendments codified at 30 CFR 948.16(xx), (qqq), (ffff), (gggg), (hhhh), (jjjj), (nnnn), and (pppp) indicate that the WVDEP has submitted draft proposed language to the State legislature for consideration for rulemaking during its 2001 session. The WVDEP intends that the draft proposed language would satisfy the specific required program amendments identified above. If and when the State legislature approves new rules that are intended to satisfy the required program amendments identified above, and those rules are submitted to OSM for review and approval, we will announce the proposed rules in a future proposed rule notice published in the **Federal Register**. At that time we will invite public comment on whether those rules satisfy the relevant program amendments codified at 30 CFR 948.16. In addition, in the August 18, 2000, **Federal Register**, we found that the State had satisfied the required amendments codified at 30 CFR 948.16(www) and (xxx), and, therefore, we removed them.

Presented below, you will find West Virginia's response to the required program amendments codified at 30 CFR 948.16(a), (dd), (ee), (oo), (tt), (mmm), (nnn), (ooo), (sss), (vvv)(1), (2), (3), and (4), (zzz), (aaaa), (bbbb), (iiii), (kkkk), (llll), (mmmm) and (oooo).

30 CFR 948.16(a): By November 26, 1985, West Virginia must submit copies of proposed regulations or otherwise propose to amend its program to provide that all surface blasting operations (including those using less than five pounds and those involving surface activities at underground mining operations) shall be conducted under the direction of a certified blaster.

State response:

This required program amendment should be removed. Current language in 6.1 of the rules states "a blaster certified by the Division of Environmental Protection shall be responsible for all blasting operations * * *". A letter dated August 30, 1994 from James Blankenship (OSM) to David C. Callaghan (WVDEP Director) stated "required amendment 30 CFR 948.16(a) will be removed because the state has removed the offending language". (Federal counterpart 816.61(c))

The Administrative Record Number of the August 30, 1994, letter referred to above is WV-934, and is available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(dd): By April 30, 1991, West Virginia shall submit proposed revisions to Subsection 38-2-9.3 of its

surface mining reclamation regulations or otherwise propose to amend its program to establish productivity success standards for grazing land, pasture land and cropland; require use of the 90 percent statistical confidence interval with a one-sided test using a 0.10 alpha error in data analysis and in the design of sampling techniques; and require that revegetation success be judged on the basis of the vegetation's effectiveness for the postmining land use and in meeting the general revegetation and reclamation plan requirements of Subsections 9.1 and 9.2. Furthermore, by that date, West Virginia shall submit for OSM approval its selected productivity and revegetation sampling techniques to be used when evaluating the success of ground cover, stocking or production as required by 30 CFR 816.116 and 817.116.

State response:

This required program amendment should be removed. The language of 9.3.d. of the state rules provides that, "Not less than two (2) years following the last date of augmented seeding, * * * the Director shall use a statistically valid sampling technique with a ninety (90) percent statistical confidence interval from the handbook". Additionally, Chapter 20 in the WVDEP Technical Handbook (copy attached) describes the "Modified Rennie Farmer Method" which contains the sampling procedures and evaluative technique developed for West Virginia to determine revegetation success standards with a 90% statistical confidence.

The productivity for grazing land, pastureland, and cropland can be based upon the productivity determinations for similar soil classifications of a particular geographic area as determined by the NRCS. Based upon such information, WVDEP by practice will develop a method to identify and measure the productivity rates for mine sites that are to have postmining land uses of grazing, pasture, or crop.

The information provided by the State (Chapter 20 of the WVDEP Technical Handbook, and a copy of a revegetation success outreach initiative) is available for review at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(ee): By April 30, 1991, West Virginia shall submit documentation that the U.S. Soil Conservation Service (SCS), now the NRCS, has been consulted with respect to the nature and extent of the prime farmland reconnaissance inspection required under Subsection 38-2-10.1 of the State's surface mining reclamation regulations. In addition, the State shall either delete paragraphs (a)(2) and (a)(3) of Subsection 38-2-10.2 or submit documentation that the SCS State Conservationist concurs with the negative determination criteria set forth in these paragraphs.

State response:

This required program amendment should be removed since each permit application contains a soil survey in accordance with the standards of the National Cooperative Survey. The procedure for consulting the National Soil Survey Center (NSSC) formerly USSCS, is described in Section 34 of the Permitting Handbook (copy attached). Since 1983, West Virginia has had an agreement with SCS, now NRCS, to contact them on a case by case basis since prime farmland as defined by the NRCS rarely exists in the major mining counties. In addition, the West Virginia Soil Conservation Districts are notified as part of the "affected agencies notification" process. (Federal counterpart 716.7(c)). This notification would afford NRCS the opportunity to do an investigation and provide comment (if appropriate) relative to a prime farmland determination.

In regards to deleting 10.2.a.3., the SCS at that time published the final rule pertaining to "Prime and Unique Farmlands" in the January 31, 1978 **Federal Register**, Volume 43, No. 21. In that rule, it states that "the soils are not flooded frequently during the growing season (less than once in 2 years)" and "less than 10 percent of the surface layer (upper) 6 inches) in these consists of rock fragments coarser than 3 inches (7.6 cm) in diameter. Therefore, 10.2.a.3. is consistent with the definition of Prime Farmland since it excludes frequently flooded soils and/or very rocky surfaces and is similar to its federal counterpart at 716.7(d)(2).

When the SCS listed the prime farmland soil mapping units for West Virginia, none of the units had a slope range that exceeded 10 percent. Therefore, if the slope of all land within the permit is 10 percent or greater, it does not contain any prime farmland soil mapping. The language in 10.2.a.3. is similar to its federal counterpart at 716.7(d)(3). As a general matter, the NRCS maps are used in making a vegetative determination based upon available information and site reconnaissance, and if there is a soil series (type) or other information which indicates the area could potentially be classified as prime farmland, then the NRCS is contacted for a definitive decision. WVDEP will within 90 days propose a consultation process with NRCS when the slope range for an application is less than 10%.

The information the State referred to above (Section 34 of the WVDEP Permitting Handbook) is available for review at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(oo): By June 1, 1992, West Virginia shall submit proposed revisions to subsection 38-2-5.4(b)(8) of its surface mining reclamation regulations to require that excavated sediment control structures which are at ground level and which have an open exit channel constructed of non-erodible material be designed to pass the peak discharge of a 25-year, 24-hour precipitation event.

State response:

This required program amendment should be removed. In a letter dated August 30, 1994

from James Blankenship (Charleston Field Office Director of OSM) to David C. Callaghan (Director of WVDEP), it is stated that, "OSM to approve state proposal as a state exemption" (copy attached). This is similar to a provision of the Illinois approved program. A reason for providing an exemption is that since the terrain dictates to some degree the location and size of sediment control ditches and these structures (sediment ditches) are normally on bench and small in size, if the OSM referenced 25-year, 24-hour design requirement applied to on bench sediment control ditches, the spillway would be larger than the sediment pond, thus providing no retention time to provide for settling of sediment. The WVDEP's design requirement of a ten-year 24-hour storm event is as effective as the federal program. Additionally OSM recognized in the August 30, 1994 letter that "these types of structures by their very nature are not subject to catastrophic failure or excessive erosion. The design criteria are established to address these potentials and are of no significance for these structures * * *". In addition, sediment control ditches are generally behind other sediment structures which are designed to pass a 25-year, 24-hour storm event.

The Administrative Record Number of the August 30, 1994, letter referred to above is WV-934, and is available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(tt): By June 1, 1992, West Virginia shall submit proposed revisions to subsections 38-2-5.4(b)(1) and 5.4(d)(1) to require that all structures be certified as having been built in accordance with the detailed designs submitted and approved pursuant to subsection 3.6(h)(4), and to require that as-built plans be reviewed and approved by the regulatory authority as permit revisions.

State response:

This required program amendment should be removed. The WVDEP has developed a procedure for review of as-built certifications. (This procedure is included in the WVDEP Inspection and Enforcement Handbook—copy attached.) For structures with minor design changes, the inspector will submit as-built plans in accordance with 5.4.b. Minor changes are those within the construction tolerances described in 3.35 of the rules. For structures with major design changes, a permit revision in accordance with 3.28.c of the rules is required to be submitted and approved prior to certification. The "as built" certifications are after review incorporated as part of the permit and the "as built" drawings become the design for the structure. A 1988 OSM directive (copy attached) describes the federal policy and procedures for processing construction certifications when they indicate that a structure has been constructed differently from the approved design and this OSM directive treats "as built" certifications in a manner similar to the WV program.

The information submitted by the State (the WVDEP Inspection and

Enforcement Handbook—section on Drainage System Certifications, and the 1988 OSM directive on Construction Certification of Siltation Structures (TSR-9) is available at the locations listed under **ADDRESSES**, above. TSR-9 is also available via the Internet at: <http://www.osmre.gov/>.

30 CFR 948.16(mmm): By August 1, 1996, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise § 22-3-13(e) to limit the authorization for a variance from approximate original contour to industrial, commercial, residential, or public alternative postmining land use, in accordance with section 515(e)(2) of SMCRA.

State response:

This required program amendment is being addressed in a code change submitted to the OSM on March 17, 2000. A copy of the change to WV Code 22-3-13(e) is attached and pending OSM action. Additionally, a policy was implemented which requires a market need analysis as set forth in the federal regulations. The policy will operate until such time as OSM approves the program amendment.

A copy of the change to WV Code 22-3-13, and the policy referred to above are available at the locations listed under **ADDRESSES**, above. We note that the State's response above is not correct, in that the change submitted to OSM on March 17, 2000, was to WV Code 22-3-13(c)(3) concerning mountaintop removal mining, and not to WV Code 22-3-13(e) concerning steep slope mining operations.. See the August 18, 2000, **Federal Register** (65 FR 50409, 50410) for our findings concerning WV Code 22-3-13(c)(3).

30 CFR 948.16(nnn): By September 14, 1998, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise Section 22B-1-7(d) to remove unjust hardship as a criterion to support the granting of temporary relief from an order or other decision issued under Chapter 22, Article 3 of the West Virginia Code.

State response:

This required program amendment should be removed. Since 22B-1-7(d) applies to administrative, environmental boards created for appeals other than SMCRA purposes, requiring deletion of the provision to such boards is beyond OSM jurisdiction. WVDEP in stay hearings before the Surface Mine Board has informed the Board that unjust hardship is an invalid basis to grant temporary relief for SMCRA purposes. The Surface Mine Board can, under 22B-1-3(b)(6)(c), establish procedural rules for temporary relief which in the position of

WVDEP should be the same as those that the director must apply in considering a request for temporary relief. (See WVC 22-3-17(f)). However, WVDEP does acknowledge that 22B-1-7(d) should be revised to delete unjust hardship as a criterion to support the granting of temporary relief from an order or other decision issued under Chapter 22, Article 3 of the West Virginia Code.

30 CFR 948.16(ooo): By September 14, 1998, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise Section 22B-1-7(h) by removing reference to Article 3, Chapter 22.

State response:

This required program amendment should be removed. The appeals heard by the Environmental Quality Board referenced in WV Code 22B-11-7(h) are not SMCRA issues but are related to the West Virginia Water Pollution and Control Act at WV Code 22-11-1 et seq. Therefore, this does not fall under OSM jurisdiction. WVDEP does acknowledge that the reference in WV Code 22B-1-7(h) to "22-3-1 et seq." is inappropriate and should be removed by the Legislature.

30 CFR 948.16(sss): By August 1, 1996, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise CSR § 38-2-14.5(h) and § 22-3-24(b) to clarify that the replacement of water supply can only be waived under the conditions set forth in the definition of "Replacement of water supply," paragraph (b), at 30 CFR 701.5.

State response:

This required program amendment should be removed. The provisions of 30 CFR 701.5(b) for replacement of water supply states "If the affected water supply was not needed for the use in existence at the time of loss, contamination, or diminution, and if the supply is not needed to achieve the postmining land use, replacement requirements may be satisfied by demonstrating that a suitable alternative water source is available and could be developed." The requirement to identify an alternative source of water if it is likely the proposed mining operation may impact the quantity or quality of a significant aquifer is already a requirement for the PHC under 3.22.b.4. and 3.22.c.4. and in the hydrologic reclamation plan (3.22.f.5.). Therefore, this information is required regardless of whether a waiver was requested when a significant aquifer is likely to be contaminated or otherwise impacted. The repair or replacement requirement for water supplies impacted by mining is contained in WV Code 22-3-24.

30 CFR 948.16(vvv)(1): Amend the West Virginia program to be consistent with 30 CFR 701.11(e)(2) by clarifying that the exemption at CSR 38-2-3.8(c)

does not apply to (1) the requirements for new and existing coal mine waste disposal facilities; and (2) the requirements to restore the land to approximate original contour.

State response:

This required program amendment should be removed. The state regulation in 3.8.c. was amended to not apply to new and existing coal waste facilities and was submitted to the Office of Surface Mining on March 17, 2000 as a program amendment. A copy of the revised 3.8.c. is attached and is pending OSM action. The state saw no need to add language about approximate original contour to regulation at 3.8(c) since the WV Surface Coal Mining and Reclamation Act performance standard at 22-3-13(b)(3) is clear about the requirement to restore the approximate original contour with respect to surface mines.

A copy of the change to CSR 38-2-3.8.c. is available at the locations listed under **ADDRESSES**, above. See the August 18, 2000, **Federal Register** (65 FR 50409, 50413) for our final rule notice approving the State's change which clarifies that the exemption at CSR 38-2-3.8.c. does not apply to new and existing coal waste facilities. We amended 30 CFR 948.16(vvv)(1) by deleting the requirement to clarify that the exemption at CSR 38-2-3.8(c) does not apply to the requirements for new and existing coal mine waste disposal facilities. However, we are continuing to require at 30 CFR 948.16(vvv)(1) that the State clarify that the exemption at CSR 38-2-3.8(c) does not apply to the requirement to restore the land to approximate original contour.

30 CFR 948.16(vvv)(2): Amend CSR 38-2-4.12 to reinstate the following deleted language: "and submitted for approval to the Director as a permit revision."

State response:

This required program amendment should be removed. The WVDEP has a procedure for review of as-built certifications. (This procedure is included in the Inspection and Enforcement Handbook under Drainage System Certifications.) For structures with minor design changes, the operator is to submit as-built plans in accordance with 5.4.b.1. Minor changes are those within the construction tolerances described in 3.35 of the rules. The "as built" certifications are after review incorporated as part of the permit and the "as built" drawings become the design for the structure. For structures with major design changes, a permit revision in accordance with 3.28.c of the rules is required to be submitted and approved as part of the permit prior to certification. In addition, the WVDEP approach appears to be consistent with the OSM position expressed in the OSM directive (copy attached).

The information submitted by the State (the WVDEP Inspection and Enforcement Handbook—section on

Drainage System Certifications, and the 1988 OSM directive on Construction Certification of Siltation Structures (TSR-9) are available at the locations listed under **ADDRESSES**, above. TSR-9 is also available via the Internet at: www.osmre.gov/.

30 CFR 948.16(vvv)(3): Amend the West Virginia program by clarifying that the requirements at CSR 38-2-5.4(c) also apply to slurry impoundments.

State response:

This required program amendment should be removed. The state program does clarify that 5.4 applies to slurry impoundments. In 22.4.c., small impoundments, it states "coal refuse sites which results in impoundments which are not subject to the Dam Control Act or the Federal Mine Health and Safety Act shall be designed, constructed, and maintained subject to the requirements of this subsection and 5.4 and 22.5.j.6." This requirement is similar to and as effective as that which appears at 816/817.49 (a)(2) and (a)(9).

30 CFR 948.15(vvv)(4): Amend CSR 38-2-14.15(m), or otherwise amend the West Virginia program to require compliance with 30 CFR 816/817.81 (b), (d), and (e) regarding coal refuse disposal, foundation investigations and emergency procedures and to clarify that where the coal processing waste proposed to be placed in the backfill contains acid- or toxic-producing materials, such material must not be buried or stored in proximity to any drainage course such as springs and seeps, must be protected from groundwater by the appropriate use of rock drains under the backfill and along the highwall, and be protected from water infiltration into the backfill by the use of appropriate methods such as diversion drains for surface runoff or encapsulation with clay or other material of low permeability.

State response:

This required program amendment should be removed. The refuse placed pursuant to 14.15(m) is placed into the mine workings or excavation areas. This placement in accordance with the backfilling and grading, stability and toxic material handling plans is consistent with the provisions of 30 CFR 816/817.81.

30 CFR 948.16(zzz): By April 12, 1999, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption to revise 38-2-3.12.a.1., or otherwise amend the West Virginia program to require that the map of all lands, structures, and drinking, domestic and residential water supplies which may be materially damaged by subsidence show the type and location of all such lands, structures, and drinking, domestic and

residential water supplies within the permit and adjacent areas, and to require that the permit application include a narrative indicating whether subsidence, if it occurred, could cause material damage to or diminish the value or reasonably foreseeable use of such structures or renewable resource lands or could contaminate, diminish, or interrupt drinking, or residential water supplies.

State response:

This required program amendment should be removed. It is the WVDEP's position that 3.12.a.1. is as effective as 784.20.a. (1) and (2). The wording of 3.12.a.1. requires that the applicant make a finding on whether or not subsidence could cause material damage or diminution of value or use of structures or renewable resource lands; or could contaminate, diminish or interrupt water supplies. Consequently, the applicant must submit supporting documentation that subsidence will or will not cause material damage or diminish, contaminate or interrupt water supplies."

The WVDEP contends that the phrase "adjacent areas within an angle of draw of at least 30°" is as effective as "adjacent areas". In 30 CFR 701.5, adjacent area is defined as "the area outside the permit area where a resource or resources, determined according to the context in which adjacent area is used, are or reasonably could be expected to be adversely impacted by the proposed mining operations, including probable impacts from underground workings." Therefore, adjacent area for subsidence is the area where it can reasonably be expected that adverse impacts related to subsidence could be caused by the proposed underground working. This fits in with the language of 12.a.1. that provides, "adjacent areas within an angle of draw of at least 30°". Provided, however, an angle of draw other than 30° can be used * * *. Historic data and publications have demonstrated that one can reasonably expect impacts from subsidence within an angle of draw of at least 30°. However, based upon geological factors, the mining plan and historic information of the area, the impact area related to subsidence can be expanded and this is done in the form of a correction sent to the applicant by WVDEP.

In addition, to assess the potential impacts to ground and surface water resources, the WVDEP requires an applicant to conduct a ground water and surface water inventory which includes all areas within 1/2 mile of the proposed operation, including the underground mine limits. (See instructions for completing the application, Section J, copy attached.) If a surface or ground water resource could be impacted, it is identified in the Cumulative Hydrologic Impact Assessment, it is monitored and a plan developed as part of the permit which includes not only measures to protect such water resource, but a contingency plan is required to describe what steps are to be taken if it is impacted.

The information submitted by the State (instructions for completing the application, Section J) is available at the

locations listed under **ADDRESSES**, above.

30 CFR 948.16(aaaa): By April 12, 1999, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption to revise CSR 38-2-3.12.a.2., or otherwise amend the West Virginia program to require that the water supply survey required by CSR 38-2-3.12.a.2. include all drinking, domestic, and residential water supplies within the permit area and adjacent area, without limitation by an angle of draw, that could be contaminated, diminished, or interrupted by subsidence.

State response:

The state contends that 38-2-3.12.a.2. is as effective as 30 CFR 784.20(a)(3) for among other things, the reasons specified in (zzz) above.

30 CFR 948.16(bbbb): By April 12, 1999, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption to revise 38-2-3.12.a.2., or otherwise amend the West Virginia program to require that the permit applicant pay for any technical assessment or engineering evaluation used to determine the premining condition or value or non-commercial buildings or occupied residential dwellings or structures related thereto and the quality of drinking, domestic or residential water supplies, and to require that the applicant provide copies of any technical assessment or engineering evaluation to the property owner and to the regulatory authority.

State response:

The rules at 3.12. are clear that the pre-subsidence survey is the responsibility of the applicant and that the applicant must provide the results of the survey including information and data used to develop the survey to the property owner and the director. The state has developed guidelines to provide assistance in evaluating whether the survey adequately documents pre-subsidence conditions (copy attached). Also refer to the response to (zzz) above. Consequently, WVDEP contends that the provisions of 3.12 provide for subsidence control plans that are as effective as those authorized by OSM. This is particularly true in light of the order entered April 27, 1999 in the District of Columbia, United States Court of Appeals in *National Mining Association v. Babbitt*, No. 98-5320.

The information submitted by the State (procedures for pre-subsidence structure survey) is available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(iiii): By July 13, 1999, West Virginia must submit either a

proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to:

(1) Amend section 22-3-13(c)(3) of the West Virginia program to remove the phrase "or fish and wildlife habitat and recreation lands"; and

(2) Amend "public use" at section 22-3-13(c)(3) to include the term "facility" and to further clarify that the term will be interpreted the same as "public facility (including recreation facilities) use" at SMCRA section 515(c)(3).

State response:

This was submitted to OSM on March 17, 2000. A copy of the proposed change to WV Code 22-3-13(c)(3) is attached and pending OSM action.

See the August 18, 2000, **Federal Register** (65 FR 50409, 50410-50411) for our finding concerning this required amendment. In that finding, we determined that the State had partially satisfied the required amendment at 30 CFR 948.16(iiii). Consequently, we amended the required amendment at 30 CFR 948.16(iiii) to read as follows: "By October 17, 2000, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption to amend the term 'recreational uses' at W.Va. Code 22-3-13(c)(3) to mean 'recreational facilities use' at SMCRA section 515(c)(3)."

30 CFR 948.16(kkkk): By January 11, 2000, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed together with a timetable for adoption, to remove the words "upon request" at W. VA. Code 22-3-13a(g), or otherwise amend its program to require that a copy of the pre-blast survey be provided to the owner and/or occupant even if the owner or occupant does not specifically request a copy.

State response:

The WVDEP has submitted rules that are currently being reviewed by the OSM. Then WVDEP will propose a code and regulation change for the 2001 legislative session.

See the proposed rule notice concerning the State's blasting rules that we published on December 5, 2000 (65 FR 75889). In addition, the proposed blasting rules are available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(llll): By January 11, 2000, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to remove the phrase "or the surface impacts of the underground mining methods" from 22-3-13a(j)(2), or otherwise amend its program to clarify

that the surface blasting impacts of underground mining operations are subject to the requirements of 22-3-13a.

State response:

The WVDEP has submitted rules that are currently being reviewed by the OSM. If rules do not satisfactorily address this issue, then WVDEP will propose a code change for the 2001 legislative session.

See the proposed rule notice concerning the State's blasting rules that we published on December 5, 2000 (65 FR 75889). In addition, the proposed blasting rules are available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(mmmm): By January 11, 2000, West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to remove the phrase "of overburden and coal" from W.Va. Code 22-3-30a(a), or to otherwise clarify that its general surface coal mining blasting laws and regulations apply to all blasting at surface coal mining and reclamation operations and surface blasting activities incident to underground coal mining, including, but not limited to, initial rounds of slopes and shafts.

State response:

The WVDEP submitted rules that are currently being reviewed by the OSM. If rules do not satisfactorily address this issue, then WVDEP will propose a code change for the 2001 legislative session.

See the proposed rule notice concerning the State's blasting rules that we published on December 5, 2000 (65 FR 75889). In addition, the proposed blasting rules are available at the locations listed under **ADDRESSES**, above.

30 CFR 948.16(oooo): Remove CSR 38-2-23.

State response:

The WVDEP proposed to delete this section in the rule change for the 2001 legislative session. However, the WVDEP Advisory Council indicated that the proposed deletion be removed from the final rule change. A copy of the Advisory Council's minutes is attached. Additionally, because of local geographic conditions, WVDEP will continue to pursue approval of incidental coal removal so that potentially unregulated excavation for development can be regulated without wasting of the coal.

The information submitted by the State (the minutes of the July 6, 2000, meeting of the Environmental Protection Advisory Council) is available at the locations listed under **ADDRESSES**, above. CSR 38-2-23 concerns special authorization for coal extraction as an incidental part of development of land

for commercial, residential, or civic use. See the May 5, 2000, **Federal Register** (65 FR 26130, 26133) for our finding and explanation for the required program amendment codified at 30 CFR 948.16(oooo). Also see the February 9, 1999, **Federal Register** (6201, 6204) for our finding concerning WV Code 22-3-28(a), (b), and (c) which concern special authorizations to engage in surface mining incidental to the development of land for commercial, residential, industrial, or civic use.

III. Public Comment Procedures

In accordance with the provisions of 30 CFR 732.17(h), OSM is seeking comments, on whether the proposed amendment satisfies the applicable program approval criteria of 30 CFR 732.15. If the amendment is deemed adequate, it will become part of the West Virginia program.

Written Comments

If you submit written or electronic comments on the proposed amendment during the 30-day comment period, they should be specific, should be confined to issues pertinent to the notice, and should explain the reason for your recommendation(s). We may not be able to consider or include in the Administrative Record comments delivered to an address other than the one listed above (see **ADDRESSES**).

Electronic Comments

Please submit Internet comments as an ASCII, Word Perfect, or Word file avoiding the use of special characters and any form of encryption. Please also include "Attn: SPATS NO. WV-088-FOR" and your name and return address in your Internet message. If you do not receive a confirmation that we have received your Internet message, contact the Charleston Field office at (304) 347-7158.

Availability of Comments

Our practice is to make comments, including names and home addresses of respondents, available for public review during our regular business hours at the OSM Administrative Record Room (see **ADDRESSES**). Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We

will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Public Hearing

If you wish to speak at the public hearing, you should contact the person listed under **FOR FURTHER INFORMATION CONTACT** by 4:00 p.m. (local time), on January 18, 2001. The location and time of the hearing will be arranged with those persons requesting the hearing. If no one requests an opportunity to speak at the public hearing, the hearing will not be held.

To assist the transcriber and ensure an accurate record, we request, if possible, that each person who testifies at a public hearing provide us with a written copy of his or her testimony. The public hearing will continue on the specified date until all persons scheduled to speak have been heard. If you are in the audience and have not been scheduled to speak and wish to do so, you will be allowed to speak after those who have been scheduled. We will end the hearing after all persons scheduled to speak and persons present in the audience who wish to speak have been heard.

Any disabled individual who has need for a special accommodation to attend a public hearing should contact the individual listed under **FOR FURTHER INFORMATION CONTACT**.

Public Meeting

If only one person requests an opportunity to speak at a hearing, a public meeting, rather than a public hearing, may be held. If you wish to meet with OSM representatives to discuss the proposed amendment, you may request a meeting by contacting the person listed under **FOR FURTHER INFORMATION CONTACT**. All such meetings will be open to the public and, if possible, notices of meetings will be posted at the locations listed under **ADDRESSES**. A written summary of each meeting will be made a part of the Administrative Record.

IV. Procedural Determinations

Executive Order 12866—Regulatory Planning and Review

This rule is exempted from review by the Office of Management and Budget under Executive Order 12866.

Executive Order 12630—Takings

This rule does not have takings implications. This determination is based on the analysis performed for the counterpart federal regulation.

Executive Order 13132—Federalism

This rule does not have federalism implications. SMCRA delineates the roles of the federal and state governments with regard to the regulation of surface coal mining and reclamation operations. One of the purposes of SMCRA is to “establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations.” Section 503(a)(1) of SMCRA requires that state laws regulating surface coal mining and reclamation operations be “in accordance with” the requirements of SMCRA, and section 503(a)(7) requires that state programs contain rules and regulations “consistent with” regulations issued by the Secretary pursuant to SMCRA.

Executive Order 12988—Civil Justice Reform

The Department of the Interior has conducted the reviews required by section 3 of Executive Order 12988 and has determined that, to the extent allowed by law, this rule meets the applicable standards of subsections (a) and (b) of that section. However, these standards are not applicable to the actual language of state regulatory programs and program amendments since each such program is drafted and promulgated by a specific state, not by OSM. Under sections 503 and 505 of SMCRA (30 U.S.C. 1253 and 1255) and 30 CFR 730.11, 732.15, and 732.17(h)(10), decisions on proposed state regulatory programs and program amendments submitted by the states must be based solely on a determination of whether the submittal is consistent with SMCRA and its implementing federal regulations and whether the other requirements of 30 CFR Parts 730, 731, and 732 have been met.

National Environmental Policy Act

Section 702(d) of SMCRA (30 U.S.C. 1292(d)) provides that a decision on a proposed state regulatory program provision does not constitute a major federal action within the meaning of section 102(2)(C) of the National Environmental Policy Act (NEPA) (42 U.S.C. 4332(2)(C)). A determination has been made that such decisions are categorically excluded from the NEPA process (516 DM 8.4.A).

Paperwork Reduction Act

This rule does not contain information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

Regulatory Flexibility Act

The Department of the Interior has determined that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The state submittal which is the subject of this rule is based upon counterpart federal regulations for which an economic analysis was prepared and certification made that such regulations would not have a significant economic effect upon a substantial number of small entities. Accordingly, this rule will ensure that existing requirements previously promulgated by OSM will be implemented by the state. In making the determination as to whether this rule would have a significant economic impact, the Department relied upon the data and assumptions for the counterpart federal regulation.

Small Business Regulatory Enforcement Fairness Act

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule:

- a. Does not have an annual effect on the economy of \$100 million.
- b. Will not cause a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions.
- c. Does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S. based enterprises to compete with foreign-based enterprises.

This determination is based upon the fact that the state submittal which is the subject of this rule is based upon counterpart federal regulations for which an analysis was prepared and a determination made that the federal regulation was not considered a major rule.

Unfunded Mandates

This rule will not impose a cost of \$100 million or more in any given year on any governmental entity or the private sector.

List of Subjects in 30 CFR Part 948

Intergovernmental relations, Surface mining, Underground mining.

Dated: December 22, 2000.

Allen D. Klein,

Regional Director, Appalachian Regional Coordinating Center.

[FR Doc. 01-74 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-05-P

FEDERAL COMMUNICATIONS COMMISSION**47 CFR Parts 1 and 2****[ET Docket No. 00-47; FCC 00-430]****Software Defined Radios****AGENCY:** Federal Communications Commission.**ACTION:** Proposed rule.

SUMMARY: This document proposes to streamline the equipment authorization procedures for software defined radios. Specifically, we propose to define software defined radios as a new class of equipment with equipment authorization rules that reflect the additional flexibility incorporated into such radios. We believe that these changes will facilitate the deployment and use of this new promising technology. The frequency and technology agility of software defined radios could increase the use of presently underutilized frequency bands.

DATES: Comments must be submitted on or before March 19, 2001, and reply comments on or before May 18, 2001.

ADDRESSES: All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of Secretary, Federal Communications Commission, 445 12th Street, SW., TW-A325, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Hugh Van Tuyl, Office of Engineering and Technology, (202) 418-7506.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Notice of Proposed Rule Making*, ET Docket 00-47, FCC 00-430, adopted December 7, 2000, and released December 8, 2000. The full text of this Commission decision is available on the Commission's Internet site, at www.fcc.gov. It is also available for inspection and copying during normal business hours in the FCC Reference Information Center, Room CY-A257, 445 12th Street, SW, Washington, DC, and also may be purchased from the Commission's duplication contractor, International Transcription Service, (202) 857-3800, 1231 20th Street, NW Washington, DC 20036. Comments may be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>, or by e-mail to ecfs@fcc.gov.

Summary of the Notice of Proposed Rule Making

1. The Notice of Proposed Rule Making (NPRM) responds to a Notice of Inquiry (NOI) in this proceeding, 65 FR 17246, March 31, 2000. The NOI sought

comments on a number of issues related to software defined radios. These issues included the current state of technology, how this technology could facilitate interoperability between radio services, how it could improve spectrum efficiency and spectrum sharing, and what changes may be required in the equipment approval process.

2. The NPRM proposes to amend part 2 of our rules to streamline the equipment authorization procedures for software defined radios (SDR). Specifically, we propose to define software defined radios as a new class of equipment with equipment authorization rules that reflect the additional flexibility incorporated into such radios. We propose to permit equipment manufacturers to make changes in the frequency, power and modulation of such radios without the need to file a new equipment authorization application with the Commission. We also propose to permit electronic labeling so that a third party may modify a radio's technical parameters without having to return to the manufacturer for re-labeling. We believe that these changes will facilitate the deployment and use of this new promising technology. The frequency and technology agility of software defined radios could increase the use of presently underutilized frequency bands.

3. We recognize that there is no universally accepted definition of a software defined radio. We stated in the NOI that many radios now contain microprocessor technology that can control functions such as frequency and power. Until recently, these functions were controlled by firmware installed at the factory and are not readily changeable by the user. To facilitate the development of these types of radios, we propose a new, more flexible equipment approval process. We propose the following definition of software defined radio to delineate what types of devices fall within the proposed new rules.

A software defined radio is a radio that includes a transmitter in which the operating parameters of the transmitter, including the frequency range, modulation type or maximum radiated or conducted output power can be altered by making a change in software without making any hardware changes.

We seek comments on the sufficiency of this definition or any alternative definitions that may be more appropriate.

4. We believe that some relaxation of the current equipment authorization procedures is appropriate. Thus, we propose to develop a more streamlined

authorization procedure for changes to software defined radios. Specifically, we propose that changes in the frequency, power, and modulation type of a software defined radio could be authorized as a new class of permissive change, which we propose to designate as Class III. This would eliminate the need to re-label equipment when new software is loaded and would streamline the filing procedure for changes to approved devices. Software changes that do not affect these operating parameters would be treated as Class I permissive changes, so no filing would be required for them. The applicant for a Class III change would submit test data showing that the equipment complies with the applicable requirements for the service(s) or rule parts under which it will operate with the new software loaded. The applicant would also have to demonstrate compliance with the applicable RF exposure requirements. The Commission would notify the applicant by letter when a permissive change is granted. Once a Class III permissive change has been granted for new software that affects the operating parameters, the software could be loaded into units in the field. The record in the Commission's database for each authorized device would show the approved frequency range(s), power and modulation type(s) as it does now. Additional frequency ranges or other new technical parameters would be added to the database record for an authorization when a permissive change is granted.

5. We propose that the original certification application must identify the equipment as a software defined radio, and that only the grantee of the authorization for a software defined radio may file for a Class III permissive change. We also propose that Class III permissive changes may only be made to equipment in which no hardware changes have been made from the originally approved device to eliminate ambiguity about which hardware and software combinations have been approved. We recognize that while the filing procedure for permissive changes is streamlined, Commission staff is still required to perform a technical review of the new test data for compliance with the rules. Therefore, we propose to apply the filing fee for certification of transmitters used in licensed services to the new Class III permissive changes to reflect the staff time required to process these changes.

6. We seek comments on whether a new class of permissive change should be established, the type of information that should be submitted to show compliance with the service rules and

RF exposure requirements, the appropriate filing fee for such changes, whether parties other than the grantee should be allowed to file for permissive changes.

7. In addition, we seek comments on whether this new class of permissive change should be limited to software changes only, whether we should allow a combination of hardware and software permissive changes in a single device, whether there is a need for applicants to submit a copy of radio software to the Commission, and whether we should place limits on the number of hardware and software combinations under a single approval. We further seek comment on the benefits of the proposed new permissive change compared to the existing requirement for new identification numbers if we allow the alternative labeling method described in the NPRM.

8. We believe that a major benefit of software defined radios will be the ability of manufacturers to produce radios intended to be programmed by third parties with unique or specialized application software. To help realize this benefit, we are proposing an option for software defined radios to be equipped with an "electronic label" to display the FCC identification number by means of a light emitting diode (LED) display, a liquid crystal display (LCD) screen or other similar method. This would provide a method to re-label equipment in the field if a new approval were obtained by a third party for a previously approved device. The information would have to be readily accessible in a manner that allows it to be easily viewed. We request comments on this proposal, including whether there is a need for this capability, the type of display that should be required, the means that should be required for accessing the information, and the information to be displayed. We recognize that not all transmitters that are potentially programmable would normally have an LED, LCD or similar display, so we also request comments on whether manufacturers would need to add such displays to take advantage of the electronic labeling capability. We also seek comments on whether electronic labeling should be permitted for other types of equipment besides software defined radios.

9. We tentatively conclude that a means will be necessary to avoid unauthorized modifications to software that could affect the compliance of a radio. While we believe we may eventually have to adopt rules addressing software authentication, we believe it would be premature for us to propose specific requirements for

authentication while standards are still under development. Accordingly, at this time we are proposing a more general requirement that manufacturers must take steps to ensure that only software that is part of a hardware/software combination approved by the Commission or a TCB can be loaded into a radio. The software must not allow the user to operate the radio with frequencies, output power, modulation types or other parameters outside of those that were approved. Manufacturers may use authentication or any other means to meet these requirements, and must describe the methods in their application for equipment authorization. The grantee of an equipment authorization is responsible for ensuring the integrity of the authentication or security system. Failure to do so could result in the revocation of the authorization. We believe that this proposal would protect against harmful interference and safety hazards from software defined radios without interfering with the development of the technology. We request comments on this proposal, including whether it could impede legitimate third party software developers from developing applications for software defined radios. We also seek comments on the types of authentication standards that are likely to be developed, whether the standards should be industry developed or government sponsored, whether the standards should be voluntary or mandatory, and whether these standards would be applicable to all types of software defined radio equipment.

10. We believe that the rule changes we are proposing will allow manufacturers greater flexibility in obtaining approval for software defined radios and will facilitate deployment of this equipment to consumers. We further believe that the proposed requirements for authentication of software will provide a safeguard against unauthorized modifications of approved equipment. However, we recognize that a non-compliant software defined radio has the potential to interfere with other radio services due to its potential to operate in multiple frequency bands. Therefore, we request comments on whether we should enhance our enforcement capabilities and what particular changes we should make. For example, should we establish requirements prohibiting manufacturers or grantees from knowingly marketing software that would cause a software defined radio to operate in violation of the Commission's rules? We request comments on this and any other matters

that may be pertinent to software defined radios.

Initial Regulatory Flexibility Analysis

11. As required by the Regulatory Flexibility Act (RFA),¹ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this *Notice of Proposed Rule Making (NPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in paragraph 38 of this NPRM. The Commission will send a copy of this NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the NPRM and IRFA (or summaries thereof) will be published in the **Federal Register**.³

A. Need for, and Objectives of, the Proposed Rules

12. A number of parties are currently developing software defined radio technology. In a software defined radio, functions that were carried out by hardware in the past are performed by software. This means that the operating parameters of the radio, such as the frequency and type of modulation, could be readily changed in the field. The current rules do not prohibit software programmable radios. However, they require a new approval and a new identification number on a permanently affixed label when changes to the frequency, power or type of modulation are made. The requirement to re-label equipment in the field when a change is made could tend to discourage deployment of software defined radios to consumers. Therefore, we are proposing changes to our equipment authorization rules to facilitate such deployment. These changes would streamline the equipment approval process for software defined radios and would reduce the filing burden on applicants.

B. Legal Basis

13. The proposed action is authorized under Sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as

¹ See 5 U.S.C. 603. The RFA, see 5 U.S.C. 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Public Law 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² See 5 U.S.C. 603(a).

³ See *id.*

amended, 47 U.S.C. 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

14. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, herein adopted.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁶ A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁷

15. The Commission has not developed a definition of small entities applicable to Radio Frequency Equipment Manufacturers (RFE Manufacturers). Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to manufacturers of "Radio and Television Broadcasting and Communications Equipment." According to the SBA's regulation, an RFE manufacturer must have 750 or fewer employees in order to qualify as a small business.⁸ Census Bureau data indicates that there are 858 companies in the United States that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.⁹ We believe that many of the companies that manufacture RFE equipment may qualify as small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

16. We propose to establish a new class of "permissive change" for software defined radios when changes are made to the software that affect the frequency, power or type of modulation. This class of change would require the manufacturer to submit a description of the software changes to the FCC or a designated Telecommunications Certification Body (TCB). The manufacturer would also be required to submit test data showing that the radio complies with the technical standards in our rules with the new software loaded. The new software could not be loaded into radios until the FCC or TCB notifies the manufacturer that the changes are acceptable. The original FCC identification number for the equipment could continue to be used, so no re-labeling would be required.

17. We also proposed to allow an "electronic label" to be used on software defined radio transmitters as an alternative to the permanently affixed label the rules currently require. The equipment would display the FCC identification number by means of a liquid crystal display or similar screen.

18. We further proposed that manufacturers must take steps to ensure that only software that has been approved by the FCC or a TCB can be loaded into a transmitter. The software must not allow the user to operate the transmitter with frequencies, output power, modulation types or other parameters outside of those that were approved. Manufacturers may use authentication codes or any other means to meet these requirements, and must describe the methods in their application for equipment authorization.

E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

19. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

20. We considered three alternatives to streamline the requirements for software defined radios, which will reduce the burden on small entities.

(a) The first alternative, which we proposed in the NPRM, would permit changes in the frequency, power, and modulation type of a software defined radio to be authorized as a new class of permissive change. A new FCC identification number is not required for permissive changes, so there would be no need to re-label equipment when new software that changes the operating parameters is loaded. Permissive changes only require filing test data showing that the equipment complies with the applicable requirements in the rules with the new software. A complete application with exhibits including block diagrams, schematic diagrams, photographs and the users' manual is not required. Only the party holding the grant of equipment authorization may file for permissive changes.

(b) The second alternative, which we proposed as an option in the NPRM, is to allow the FCC identification number to be displayed electronically rather than on a permanently affixed label. A major benefit of software defined radios will be the ability of manufacturers to produce radios intended to be programmed by third parties, including small entities, which could develop unique or specialized application software. The "electronic label" would help realize this benefit. It would provide a method to re-label equipment in the field without having to change a physical label if a new approval were obtained by a third party for a previously approved device.

(c) The third alternative we considered is to allow software changes to be approved under the Declaration of Conformity (DoC) procedure. DoC is a self-approval procedure in which the manufacturer has the equipment tested for compliance at an accredited laboratory. Once the equipment has been found to comply, it may be marketed without any approval from the FCC or a TCB. Although this alternative would reduce the burden on small entities, we declined to propose it because we believe that most radio transmitters require a higher level of oversight to ensure that they comply with the rules to prevent interference and protect users from excessive RF radiation. Certain radio transmitters are already permitted to be self-approved, and we are not proposing any change in the authorization requirements for them.

⁴ 5 U.S.C. 603(b)(3).

⁵ Id. 601(6).

⁶ 5 U.S.C. 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the **Federal Register**." 5 U.S.C. 601(3).

⁷ Small Business Act, 15 U.S.C. 632 (1996).

⁸ See 13 CFR 121.201, Standard Industrial Classification (SIC) Code 3663.

⁹ See U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities (issued May 1995), SIC category 3663.

F. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

21. None.

22. Accordingly, *It is Ordered* that pursuant to the authority contained in sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304, and 307, this Notice of Proposed Rule Making *Is Adopted*.

23. *It is Further Ordered* that the Commission's Consumer Information Bureau, Reference Information Center, *Shall Send* a copy of this NPRM, including the Initial Regulatory

Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 1

Administrative practice and procedure.

47 CFR Part 2

Communications equipment, Radio.

Federal Communications Commission.

William F. Caton,

Deputy Secretary.

Proposed Rules

For the reasons discussed, parts 1 and 2 of title 47 of the Code of Federal

Regulations are proposed to be amended as follows:

PART 1—PRACTICE AND PROCEDURE

1. The authority citation for part 1 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309.

2. Section 1.1103 is amended by adding a new entry to the table to read as follows:

§ 1.1103 Schedule of charges for equipment authorization, experimental radio services, and international telecommunications settlements.

Action	FCC Form No.	Fee amount	Payment type code	Address
1. Certification				
* * *				
f. Class III permissive changes	731 & 159	495	ECC	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315, Pittsburgh, PA 15251-5315.
* * *				

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

3. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

4. In § 2.1, paragraph (c) is amended by adding the following definition in alphabetical order to read as follows:

§ 2.1 Terms and definition.

* * * * *

(c) * * *

Software defined radio. A radio that includes a transmitter in which the operating parameters of the transmitter, including the frequency range, modulation type and maximum radiated or conducted output power can be altered by making a change in software without making any hardware changes.

* * * * *

5. Section 2.925 is amended by redesignating paragraphs (e) and (f) as (f) and (g), respectively, and by adding a new paragraph (e) to read as follows:

§ 2.925 Identification of equipment.

* * * * *

(e) A software defined radio may be equipped with a means such as a user display screen to display the information normally contained in the

nameplate or label. The information must be readily accessible.

* * * * *

6. Section 2.932 is amended by adding paragraph (e) to read as follows:

§ 2.932 Modification of equipment.

* * * * *

(e) Manufacturers must take steps to ensure that only software that has been approved by the FCC or a TCB can be loaded into a transmitter. The software must not allow the user to operate the transmitter with frequencies, output power, modulation types or other parameters outside of those that were approved. Manufacturers may use authentication codes or any other means to meet these requirements, and must describe the methods in their application for equipment authorization.

7. Section 2.1043 is amended by revising paragraphs (a) and (b) to read as follows:

§ 2.1043 Changes in certificated equipment.

(a) Except for Class III permissive changes, changes to the basic frequency determining and stabilizing circuitry (including clock or data rates), frequency multiplication stages, basic modulator circuit or maximum power or field strength ratings shall not be performed without application for and authorization of a new grant of

certification. Variations in electrical or mechanical construction, other than these indicated items, are permitted provided the variations either do not affect the characteristics required to be reported to the Commission or the variations are made in compliance with the other provisions of this section.

(b) Three classes of permissive changes may be made in certificated equipment without requiring a new application for and grant of certification. None of the classes of changes shall result in a change in identification.

(1) A Class I permissive change includes those modifications in the equipment which do not degrade the characteristics reported by the manufacturer and accepted by the Commission when certification is granted. No filing with the Commission is required for a Class I permissive change.

(2) A Class II permissive change includes those modifications which degrade the performance characteristics as reported to the Commission at the time of the initial certification. Such degraded performance must still meet the minimum requirements of the applicable rules. When a Class II permissive change is made by the grantee, the grantee shall supply the Commission with complete information and the results of tests of the characteristics affected by such change. The modified equipment shall not be

marketed under the existing grant of certification prior to acknowledgement by the Commission that the change is acceptable.

(3) A Class III permissive change includes modifications to the software of a software defined radio transmitter that affect the frequency, modulation type, output power or maximum field strength. When a Class III permissive change is made, the grantee shall supply the Commission with a description of the changes and test results showing that the equipment complies with the applicable rules with the new software loaded, including compliance with the applicable RF exposure requirements. The modified software shall not be loaded into equipment, and the equipment shall not be marketed with the modified software under the existing grant of certification, prior to acknowledgement by the Commission that the change is acceptable.

(4) Class III permissive changes may only be made by the original grantee. Class I and Class II permissive changes may only be made by the original grantee, except as specified further.

* * * * *

[FR Doc. 01-63 Filed 1-2-01; 8:45 am]

BILLING CODE 6712-01-U

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AF67

Endangered and Threatened Wildlife and Plants; Reopening of Comment Period on the Proposed Rule To Remove the Northern Populations of the Tidewater Goby From the List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; reopening of comment period.

SUMMARY: The U.S. Fish and Wildlife Service (Service) gives notice of the reopening of the comment period for the proposed removal of the northern populations of the tidewater goby (*Eucyclogobius newberryi*) from the list of endangered and threatened wildlife. The new comment period will allow all interested parties another opportunity to submit comments on our assertions, as clarified in this notice, that the original listing rule exaggerated the risk of extinction by overestimating the rate of local population extinction, and that the northern populations of the tidewater

goby are not presently in danger of extinction or likely to become in danger of extinction within the foreseeable future. We are re-opening the comment period to clarify some points in our proposal and to solicit further public and peer-review comment.

DATES: The comment period for this proposal closes on February 2, 2001. Comments on the proposed delisting must be received by the closing date.

ADDRESSES: Written comments should be sent to the Regional Director, Regional Office, U.S. Fish and Wildlife Service, 911 NE 11th Avenue, Portland, Oregon 97232-4181. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above Service address.

FOR FURTHER INFORMATION CONTACT: Catrina Martin or Steve Morey at the above address; telephone 503/231-6131; facsimile 503/231-6243.

SUPPLEMENTARY INFORMATION:

Background

Shortly after the tidewater goby was listed as endangered in 1994, the Service initiated the recovery planning process. A contractor was hired to write a draft recovery plan and the product was a draft commonly referred to as the Swift 1995 version. This version was revised slightly in response to internal review and a revision under the authorship of Ballard and Swift was circulated among various experts and the applicable Service field offices in June 1996. Finally, in late September, 1996, a revised draft, authored by Ballard was forwarded to the Regional Office for review. In the 31 months since the listing, the Service had, in the process of drafting the recovery plan, compiled a fairly up-to-date record of what was known about the status of the goby. The goby seemed particularly responsive to climatic cycles, and the trend to extinction had not played out as projected in the 1994 listing. A number of estuaries cited in the listing rule as lacking gobies, symptomatic of the presumed range-wide decline, were in fact, inhabited by gobies. There seemed to be little actual evidence that the distribution and abundance, or overall risk of extinction had changed appreciably since 1982 when the tidewater goby was designated a category 2 candidate (47 FR 58454). Did the goby need a recovery plan, or was the original concern about extinction exaggerated? In order to decide whether to proceed with a recovery plan or to delist, a review of the merits of the original listing, and the current status of the species was initiated. The 1999

proposal to delist the goby summarizes the results of that review and concludes that delisting the tidewater goby north of Orange County is the most appropriate action.

On June 24, 1999, we published a proposed rule to remove from the list of endangered and threatened wildlife those populations of tidewater goby that occur north of Orange County, California, and to retain a distinct population segment of tidewater goby in Orange and San Diego counties as an endangered species (64 FR 33816). We proposed to delist the northern populations because our original conclusions about population trends and were either in error or not adequately supported by the best available biological information. We believe that the original listing rule (59 FR 5954) overestimated the risk of extinction and the tidewater goby may have been mistakenly listed as endangered.

The 1994 rule that listed the tidewater goby as endangered painted a picture of rapid local disappearances leading to extinction. The decline of the goby was considered to be so precipitous and the threats so severe that the conclusion of the summary of factors affecting the species was: "The tidewater goby is in imminent danger of extinction throughout its range and requires the full protection of listing as endangered under the Act to survive" (59 FR 5954). Our 1999 delisting proposal explains that the original listing inappropriately combined older permanent extinctions with temporary, drought-related extinctions to give an exaggerated impression of the rate of decline. The proposed delisting rule also argues that the original listing mistakenly assumes that because of reduced opportunities for gobies to naturally recolonize via dispersal, the species was headed toward extinction or listing under the Act. The relationship between extinction and dispersal is illustrated in the original listing with the following statement: "The number of extirpated localities of gobies has left the remaining populations so widely separated throughout most of the species' range that recolonization is unlikely." The delisting proposal explains that gobies are now present in the majority of the approximately twenty estuaries where they were reported as lost between 1984 and 1990. In most places, gobies reappeared as might have been expected, shortly after the end of drought conditions. These recolonizations confirm that the goby's well-established pattern of local extinction and reappearance still exists.

Other than habitat destruction, drought, and the disruption of population dynamics, the original rule listed a number of threats to explain the rapid rate of population extinction. These included: (1) Indirect losses due to changes in salinity; (2) surface water and groundwater diversions; (3) discharge of agricultural and sewage effluents; (4) siltation; (5) cattle grazing and feral pig activity; (6) non-native predators and competitors; and (7) river flooding and heavy rainfall. The delisting proposal discusses the strengths and weaknesses of the links that were drawn in the original listing rule between these threats and the presumed systematic decline of the goby and concludes that there is not a defensible link between the threats, either singly or in combination, and a systematic decline of the tidewater goby.

The most important argument in the delisting proposal is that extinction is not imminent, nor was it at the time of listing. The threats in the original listing are environmental perturbations that, at high levels throughout the range, either singly or in combination, could lead to systematic declines of the goby and extinction. However, the proposed delisting rule presents evidence that there is no systematic decline of gobies suggesting their extinction, and that the link drawn between the presumed threats and the extinction of the goby in the original listing is unsupported.

Even though we concluded that the original listing rule was in error, the southern populations in Orange and San Diego counties were concurrently proposed as an endangered DPS. Three criteria had to be met by the southern gobies to be recognized as endangered. First, they had to be markedly separated from other tidewater gobies. Second, they had to be significant to the rest of the species. Finally, they had to meet the Act's standards for listing a species as endangered. The first and second criteria were met on genetic and geographic grounds (see 64 FR 33819). The third criterion, the endangered status of the southern gobies, was met because so few southern populations exist that the risk of chance extinction is high. Under the best of conditions (e.g., the current wet cycle), only eight fluctuating populations exist, and all but one of these has declined to the point of local extinction in the recent past. Thus, chance demographic effects, a variety of natural or human-caused threats to habitat quality, or chance combinations of these make the extinction of gobies in Orange and San Diego counties a very real, and not altogether remote, possibility. This

argument about extinction risk hinges on the small number of populations in the south. It cannot be applied in the north, where many or all of the same threats exist (see 64 FR 33820–33824), but where the larger number of populations makes the risk of chance extinction vanishingly small.

We solicited comments from the public during two comment periods, June 24 to August 23, 1999 and February 15 to March 31, 2000. We solicited review of the delisting proposal from four outside reviewers, according to our policy on peer review (59 FR 34270), but received only one response. We also solicited comments from the California Department of Fish and Game pursuant to section 4(b)(5)(A)(ii) of the Endangered Species Act, but they did not comment. We believe, as explained below, that clarification of the proposal and a reopening of the comment period is warranted to provide the public with a meaningful opportunity to comment, and, because of the importance of peer review and the State's input, we are taking this opportunity to solicit comments from them again.

The main reaction expressed in the public comment letters on the proposed delisting was that the Service, armed with little new information was, in its delisting proposal, making an unexplainable reversal of position on the status of the goby. The public comment letters also expressed concern that the delisting proposal was arguing that the goby was in less danger of extinction now than in 1994. We believe that this concern is not warranted because the delisting proposal argues instead that the goby was in fact not in danger of extinction in 1994 and is not now. We may have inadequately conveyed the basis for the proposed delisting when we failed to specifically ask for comments on the facts, arguments, interpretations, and conclusions in the original listing. Instead, using standard language for listing actions, we asked specifically for comments concerning (1) threats; (2) range, distribution, and population size; and (3) current or planned activities that could impact the species.

Following this lead, the public observed that there is little new information since the 1994 listing on risk of extinction, nor has there been appreciable recovery. The public comments were detailed and uniform. The major themes are briefly summarized as follows: (1) It is misleading to characterize status simply in terms of numbers of populations—populations vary in size, and contribute in different ways to long-term

persistence; (2) the proposal does not apply metapopulation dynamics to the tidewater goby metapopulation; (3) the potential for recolonization is inappropriately extrapolated beyond the observational base and undue emphasis was placed on the ability to recolonize; (4) regional genetic subdivisions are ignored; (5) the proposal confuses lack of evidence with lack of effect; (6) threats in the north are treated lightly while in the south they are treated seriously; (7) effects from alien fishes are underestimated; (8) the proposal incorrectly supposes that existing regulatory mechanisms are adequate; (9) combined effects of threats are ignored; (10) the proposal ignores the certainty that drought will return to the California coast. These comments represent a reasoned and informed set of suggestions for improving our analysis of current risk of extinction, and they will be considered in the final agency decision. However, none of the comments we received from the public addressed the basis of our proposed delisting; that the 1994 listing rule misinterpreted the risk of extinction so seriously that the goby was mistakenly listed as endangered.

The review of this delisting proposal is incomplete because objective scientific review was limited to a single response, the State did not comment, and the public commented only on a portion of the determination to delist the northern populations. With this notice we clarify our proposal to delist the tidewater goby and reopen the public comment period. Reopening the comment period gives the public a more meaningful opportunity to comment by providing an additional opportunity to comment on any aspect of the proposal, but particularly on the assertion that the original listing was in error. This will also provide us the opportunity to obtain additional scientific review, and a review from the California Department of Fish and Game.

It is our intent that the final action resulting from the proposal to delist the northern populations of the tidewater goby from the list of endangered and threatened wildlife, and to recognize an endangered population in Orange and San Diego Counties, be as accurate and effective as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party. We have already accepted comments on a wide range of topics in the proposal during two previous comment periods. However, as explained above, we are hoping to generate comments on some additional

aspects of the proposed delisting rule, especially: (1) Our assertion that the original listing rule exaggerated the risk of extinction by overestimating the rate of local population extinction; (2) any information either supporting or contradicting the information in the delisting rule that suggests that the tidewater goby was not, in 1994 when it was listed, nor is now, in danger of extinction due to a high rate of local extinctions; and (3) any new information that suggests a reasonable causal link between any of the threats, or combination of threats and a high risk of extinction of the tidewater goby.

The final decision on the current proposed rule for the tidewater goby will take into consideration the comments and any additional information we receive, and such

communications may lead to a final regulation that differs from the current proposal. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, and from

individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. The comment period on this proposal closes on February 2, 2001. Written comments should be submitted to the Service office listed in the **ADDRESSES** section.

Author: The primary author of this notice is Steve Morey (see **ADDRESSES** section).

Authority: The authority for this action is the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*).

Dated: December 27, 2000.

David L. McMullen,

Acting Regional Director, Region 1, Fish and Wildlife Service.

[FR Doc. 01-66 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-55-P

Notices

Federal Register

Vol. 66, No. 2

Wednesday, January 3, 2001

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[Docket No. PY-01-003]

Notice of Request for Extension and Revision of a Currently Approved Information Collection

AGENCY: Agricultural Marketing Service, USDA

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-20), this notice announces the intention of the Agricultural Marketing Service (AMS) to request an extension for and revision to a currently approved information collection in support of the Regulations for Voluntary Grading of Poultry Products and Rabbit Products.

DATES: Comments on this notice must be received by March 5, 2001.

ADDITIONAL INFORMATION: Contact Shields Jones, Standardization Branch, Poultry Programs, Agricultural Marketing Service, U.S. Department of Agriculture, 1400 Independence Avenue, SW., Stop 0259, Washington, DC 20050-0259, (202) 720-3506.

SUPPLEMENTARY INFORMATION:

Title: Regulations for Voluntary Grading of Poultry Products and Rabbit Products—7 CFR Part 70

OMB Number: 0581-0127

Expiration Date of Approval: July 31, 2001

Type of Request: Extension and revision of a currently approved information collection.

Abstract: The Agricultural Marketing Act of 1946 (60 Stat. 1087-1091, as amended; 7 U.S.C. 1621-1627) (AMA) directs and authorizes the Department to develop standards of quality, grades, grading programs, and services which facilitate trading of agricultural products and assure consumers of quality

products which are graded and identified under USDA programs.

To provide programs and services, section 203(h) of the AMA directs and authorizes the Secretary of Agriculture to inspect, certify, and identify the grade, class, quality, quantity, and condition of agricultural products under such rules and regulations as the Secretary may prescribe, including assessment and collection of fees for the cost of the service.

The regulations in 7 CFR part 70 provide a voluntary program for grading poultry and rabbit products on the basis of U.S. standards and grades. AMS also provides other types of voluntary services under the regulations, e.g., contract and specification acceptance services and certifications of quantity. All of their voluntary grading services are available on a resident basis or a lot-fee basis. Respondents may request resident service on a continuous basis or on an as-needed basis. The service is paid for by the user (user-fee).

Because this is a voluntary program, respondents need to request or apply for the specific service they wish, and in doing so, they provide information. Since the AMA requires that the cost of service be assessed and collected, information is collected to establish the Agency's cost.

The information collection requirements in this request are essential to carry out the intent of the AMA, to provide the respondents the type of service they request, and to administer the program.

The information collected is used only by authorized representatives of the USDA (AMS, Poultry Programs' national staff; regional directors and their staffs; Federal-State supervisors and their staffs; and resident Federal-State graders, which includes State agencies). The information is used to administer and to conduct and carry out the grading services requested by the respondents. The Agency is the primary user of the information. Information is also used by each authorized State agency which has a cooperative agreement with AMS.

Estimate of Burden: Public reporting burden for this collection of information is estimated to average 0.0775 hours per response.

Respondents: State or local governments, businesses or other for-profits, Federal agencies or employees, small businesses or organizations.

Estimated Number of Respondents: 374.

Estimated Number of Responses Per Respondent: 61.44.

Estimated Total Annual Burden on Respondents: 1,781 hours.

Copies of this information collection can be obtained from Shields Jones, Standardization Branch, at (202) 720-3506.

Send comments regarding, but not limited to, the following: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; or (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, to: David Bowden, Jr., Chief, Standardization Branch, Poultry Programs, Agricultural Marketing Service, U.S. Department of Agriculture, 1400 Independence Ave., SW., Stop 0259, Washington, DC 20250-0259.

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Dated: December 27, 2000.

Howard M. Magwire,

Acting Deputy Administrator, Poultry Programs.

[FR Doc. 01-99 Filed 1-2-01; 8:45 am]

BILLING CODE 3410-02-P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[No. LS-00-14]

Beef Promotion and Research: Certification and Nomination for the Cattlemen's Beef Promotion and Research Board

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Department of Agriculture's (USDA)

Agricultural Marketing Service (AMS) is accepting applications from State cattle producer organizations or associations and general farm organizations, as well as cattle or beef importer organizations, who desire to be certified to nominate producers or importers for appointment to vacant positions on the Cattlemen's Beef Promotion and Research Board (Board). Organizations which have not previously been certified that are interested in submitting nominations must complete and submit an official application form to AMS. Previously certified organizations do not need to reapply. Notice is also given that vacancies will occur on the Board and that during a period to be established, nominations will be accepted from eligible organizations and individual importers.

DATES: Applications for certification must be received by close of business February 2, 2001.

ADDRESSES: Certification forms as well as copies of the certification and nomination procedures may be requested from Ralph L. Tapp, Chief, Marketing Programs Branch, LS, AMS, USDA; STOP 0251; 1400 Independence Avenue, SW.; Washington, D.C. 20250-0251.

FOR FURTHER INFORMATION CONTACT:

Ralph L. Tapp, Chief, Marketing Programs Branch on 202/720-1115.

SUPPLEMENTARY INFORMATION: The Beef Promotion and Research Act of 1985 (Act) (7 U.S.C. 2901 *et seq.*), enacted December 23, 1985, authorizes the implementation of a Beef Promotion and Research Order (Order). The Order, as published in the July 18, 1986, **Federal Register** (51 FR 26132), provides for the establishment of a Board. The current Board consists of 103 cattle producers and 7 importers appointed by the Secretary. The duties and responsibilities of the Board are specified in the Order.

The Act and the Order provide that the Secretary shall either certify or otherwise determine the eligibility of State cattle producer organizations or associations and general farm organizations, as well as any importer organizations or associations to nominate members to the Board to ensure that nominees represent the interests of cattle producers and importers. Nominations for importer representatives may also be made by individuals who import cattle, beef, or beef products. Persons who are individual importers do not need to be certified as eligible to submit nominations. When individual importers submit nominations, they must establish to the satisfaction of the

Secretary that they are in fact importers of cattle, beef, or beef products, pursuant to § 1260.143(b)(2) of the Order [7 CFR 1260.143(b)(2)]. Individual importers are encouraged to contact AMS at the above address to obtain further information concerning the nomination process, including the beginning and ending dates of the established nomination period and required nomination forms and background information sheets. Certification and nomination procedures were promulgated in the final rule, published in the April 4, 1986, **Federal Register** (51 FR 11557) and currently appear at 7 CFR 1260.500 through 1260.640. Organizations which have previously been certified to nominate members to the Board do not need to reapply for certification to nominate producers and importers for the upcoming vacancies.

The Act and the Order provide that the members of the Board shall serve for terms of 3 years. The Order also requires USDA to announce when a Board vacancy does or will exist. The following States have one or more members whose terms will expire in early 2002:

State or unit	Number of vacancies
Alabama	1
Arkansas	1
California	2
Colorado	1
Florida	1
Georgia	1
Idaho	1
Illinois	1
Indiana	1
Iowa	2
Kansas	2
Kentucky	1
Minnesota	1
Missouri	2
Montana	1
Nebraska	2
New York	1
North Dakota	1
Ohio	1
Oklahoma	2
Oregon	1
Pennsylvania	1
South Dakota	1
Tennessee	1
Texas	5
Virginia	1
Wisconsin	1
Northwest unit	1
Importers	1

Since there are no anticipated vacancies on the Board for the remaining States' positions, or for the positions of the Northeast or mid-Atlantic units, nominations will not be solicited from certified organizations or associations in those States or units.

Uncertified eligible producer organizations and general farm organizations in all States that are interested in being certified as eligible to nominate cattle producers for appointment to the listed producer positions, must complete and submit an official "Application for Certification of Organization or Association," which must be received by close of business February 2, 2001. Uncertified eligible importer organizations that are interested in being certified as eligible to nominate importers for appointment to the listed importer positions must apply by the same date. Importers should not use the application form but should provide the requested information by letter as provided for in 7 CFR 1260.540(b). Applications from States or units without vacant positions on the Board and other applications not received within the 30-day period after publication of this Notice in the **Federal Register** will be considered for eligibility to nominate producers or importers for subsequent vacancies on the Board.

Only those organizations or associations which meet the criteria for certification of eligibility promulgated at 7 CFR 1260.530 are eligible for certification. Those criteria are:

(a) For State organizations or associations:

(1) Total paid membership must be comprised of at least a majority of cattle producers or represent at least a majority of cattle producers in a State or unit,

(2) Membership must represent a substantial number of producers who produce a substantial number of cattle in such State or unit,

(3) There must be a history of stability and permanency, and

(4) There must be a primary or overriding purpose of promoting the economic welfare of cattle producers.

(b) For organizations or associations representing importers, the determination by the Secretary as to the eligibility of importer organizations or associations to nominate members to the Board shall be based on applications containing the following information:

(1) The number and type of members represented (*i.e.*, beef or cattle importers, etc.),

(2) Annual import volume in pounds of beef and beef products and/or the number of head of cattle,

(3) The stability and permanency of the importer organization or association,

(4) The number of years in existence, and

(5) The names of the countries of origin for cattle, beef, or beef products imported.

All certified organizations and associations, including those that were previously certified in the States or units having vacant positions on the Board, will be notified simultaneously in writing of the beginning and ending dates of the established nomination period and will be provided with required nomination forms and background information sheets.

The names of qualified nominees received by the established due date will be submitted to the Secretary of Agriculture for consideration as appointees to the Board.

The information collection requirements referenced in this notice have been previously approved by the Office of Management and Budget (OMB) under the provisions of 44 U.S.C., Chapter 35 and have been assigned OMB No. 0581-0093, except Board member nominee information sheets are assigned OMB No. 0505-0001.

Authority: 7 U.S.C. 2901 *et seq.*

Dated: December 27, 2000.

Barry L. Carpenter,

Deputy Administrator, Livestock and Seed Program.

[FR Doc. 01-94 Filed 1-2-01; 8:45 am]

BILLING CODE 3410-02-P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[Docket No. DA 00-09B]

United States Standards for Grades of Nonfat Dry Milk (Spray Process); United States Standards for Instant Nonfat Dry Milk; United States Standards for Grades of Dry Buttermilk and Dry Buttermilk Product

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Notice.

SUMMARY: This document gives notice of the availability of revisions to the United States Standards for Grades of Nonfat Dry Milk (Spray Process), the United States Standards for Instant Nonfat Dry Milk, and the United States Standards for Grades of Dry Buttermilk and Dry Buttermilk Product. The changes reduce the Standard Plate Count (bacterial estimates) for U.S. Extra Grade nonfat dry milk (spray process) and instant nonfat dry milk to a maximum of 10,000 per gram for U.S. Extra Grade dry buttermilk and dry buttermilk product to a maximum of 20,000 per gram, and for U.S. Standard Grade dry buttermilk and dry buttermilk

product to a maximum of 75,000 per gram.

EFFECTIVE DATE: This notice is effective February 2, 2001.

ADDRESSES: The revised Standards are available from Duane R. Spomer, Chief, Dairy Standardization Branch, Dairy Programs, Agricultural Marketing Service, U.S. Department of Agriculture, Room 2746, South Building, Stop 0230, P.O. Box 96456, Washington, DC 20090-6456 or at www.ams.usda.gov/dairy/stand.htm.

FOR FURTHER INFORMATION CONTACT:

Duane R. Spomer, (202) 720-7473.

SUPPLEMENTARY INFORMATION: Section 203 (c) of the Agricultural Marketing Act of 1946, as amended, directs and authorizes the Secretary of Agriculture "to develop and improve standards of quality, condition, quantity, grade, and packaging and recommend and demonstrate such standards in order to encourage uniformity and consistency in commercial practices * * *." AMS is committed to carrying out this authority in a manner that facilitates the marketing of agricultural commodities and will make copies of official standards available upon request. The United States Standards for Grades of Nonfat Dry Milk (Spray Process), the United States Standards for Instant Nonfat Dry Milk, and the United States Standards for Grades of Dry Buttermilk and Dry Buttermilk Product no longer appear in the Code of Federal Regulations (CFR); however, they are maintained by USDA.

AMS is revising the United States Standards for Grades of Nonfat Dry Milk (Spray Process), the United States Standards for Instant Nonfat Dry Milk, and the United States Standards for Grades of Buttermilk and Buttermilk Product using the procedures it published in the August 13, 1997, **Federal Register** and that appear in Part 36 of Title 7 of the CFR.

The notice which included a request for comments on the proposed changes was published in the **Federal Register** on September 8, 2000 (65 FR 54477-54478).

The current United States Standards for Grades of Nonfat Dry Milk (Spray Process) have been in effect since May 22, 1996, the United States Standards for Instant Nonfat Dry Milk have been in effect since August 7, 1996, and the United States Standards for Grades of Buttermilk and Buttermilk Product have been in effect since August 23, 1991. AMS proposed changes to these standards in response to a request by the American Dairy Products Institute (ADPI), a trade association representing

the dry milk industry. ADPI requested that the maximum number of bacteria allowed in nonfat dry milk, instant nonfat dry milk, dry buttermilk and dry buttermilk product be reduced.

AMS published a notice in the **Federal Register** detailing the proposed changes and providing a comment period of 60 days, which ended on November 7, 2000.

The American Dairy Products Institute filed a comment supporting the proposed changes. No other comments were received.

Accordingly, the changes proposed in the United States Standards for Grades of Nonfat Dry Milk (Spray Process), the United States Standards for Instant Nonfat Dry Milk, and the United States Standards for Grades of Buttermilk and Buttermilk Product are incorporated in the revised standards.

The revised United States Standards for Grades of Nonfat Dry Milk (Spray Process), the revised United States Standards for Instant Nonfat Dry Milk and the revised United States Standards for Grades of Dry Buttermilk and Dry Buttermilk Product are available either through the above address or accessing AMS Home Page on the Internet at www.ams.usda.gov/dairy/stand.htm.

Authority: 7 U.S.C. 1621-1627.

Dated: December 27, 2000.

Kenneth C. Clayton,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 01-93 Filed 1-2-01; 8:45 am]

BILLING CODE 3410-02-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-831]

Fresh Garlic From the People's Republic of China: Initiation of New Shipper Antidumping Duty Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of initiation of new shipper antidumping duty review.

SUMMARY: The Department of Commerce has received a request to conduct a new shipper review of the antidumping duty order on fresh garlic from the People's Republic of China. In accordance with section 751(a)(2)(B) of the Tariff Act of 1930, as amended, and 19 CFR 351.214(d), we are initiating this new shipper review.

EFFECTIVE DATE: January 3, 2001.

FOR FURTHER INFORMATION CONTACT: Edythe Artman or Richard Rimlinger,

Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482-0090 or (202) 482-4477, respectively.

The Applicable Statute and Regulations

Unless otherwise indicated, all citations to the Tariff Act of 1930, as amended (the Act), are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Act by the Uruguay Round Agreements Act. In addition, unless otherwise indicated, all references are made to the Department of Commerce's (the Department) regulations at 19 CFR Part 351 (2000).

Background

In a letter dated November 29, 2000, as amended on December 7, 2000, the Department received a request from Clipper Manufacturing Ltd. (Clipper), pursuant to section 751(a)(2)(B) of the Act and in accordance with 19 CFR 351.214(b), for a new shipper review of the antidumping duty order on fresh garlic from the People's Republic of China with respect to fresh garlic sold by Clipper to the United States. This order has a November anniversary month. Accordingly, we are initiating a new shipper review for Clipper as requested. The period of review is June 1, 2000, through November 30, 2000.

Initiation of Review

In accordance with 19 CFR 351.214(b)(2), Clipper provided certification that it did not export fresh garlic from the People's Republic of China to the United States during the period of investigation. Clipper also certified that, since the investigation was initiated, it has never been affiliated with any exporter or producer who exported the subject merchandise to the United States during the period of investigation, including those not individually examined during the investigation. It also submitted documentation establishing the following: (i) The date on which the fresh garlic from the People's Republic of China was first entered or withdrawn from warehouse and the date on which the subject was first shipped to the United States; (ii) the volume of that shipment; and (iii) the date of the first sale to an unaffiliated customer in the United States. Therefore, in accordance with section 751(a)(2)(B)(ii) of the Act and 19 CFR 351.214(d)(1), we are initiating a new shipper review of the antidumping duty order on fresh garlic from the People's Republic of China with respect to fresh garlic sold by

Clipper to the United States during the period of review. We intend to issue final results of this review not later than 270 days after the day on which this new shipper review is initiated.

Concurrent with publication of this notice and in accordance with 19 CFR 351.214(e), we will instruct the U.S. Customs Service to allow, at the option of the importer, the posting of a bond or security in lieu of a cash deposit for each entry of the merchandise exported by Clipper until the completion of the review.

The interested parties must submit applications for disclosure under administrative protective order in accordance with 19 CFR 351.305 and 351.306.

This initiation and notice are in accordance with section 751(a)(2)(B)(ii) of the Act and 19 CFR 351.214 and 351.221(c)(1)(i).

Dated: December 26, 2000.

Richard W. Moreland,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 01-125 Filed 1-2-01; 8:45 am]

BILLING CODE 3510-DS-P

CONSUMER PRODUCT SAFETY COMMISSION

Policy Statement on Reporting Information Under 15 U.S.C. 2064(b) About Potentially Hazardous Products Distributed Outside the United States; Request for Comments

AGENCY: Consumer Product Safety Commission.

ACTION: Notice of proposed policy statement.

SUMMARY: Section 15(b) of the Consumer Product Safety Act, 15 U.S.C. 2064(b), requires manufacturers, distributors, and retailers of consumer products to report potential product hazards to the Commission. The Commission is seeking public comment on a policy statement that information concerning products sold outside of the United States that may be relevant to evaluating defects and hazards associated with products distributed within the United States is reportable under section 15(b).¹

DATES: Comments are due no later than March 5, 2001.

ADDRESSES: Comments should be submitted to the Office of the Secretary,

¹ The Commission voted 2-1 to publish this policy statement for public comment. Commissioner Gall voted against publication of the policy statement. Her dissenting statement is available from the Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207-0001.

Consumer Product Safety Commission, Washington, DC 20207-0001, or delivered to room 502, 4330 East West Highway, Bethesda, MD 20814.

FOR FURTHER INFORMATION CONTACT: Marc Schoem, Director, Division of Recalls and Compliance, Consumer Product Safety Commission, Washington, DC 20207, telephone (301) 504-0608, ext. 1365, fax. (301) 504-0359, E-mail address—mschoem@cpsc.gov.

SUPPLEMENTARY INFORMATION: Section 15(b) of the Consumer Product Safety Act (CPSA), 15 U.S.C. 2064(b), imposes specific reporting obligations on manufacturers, importers, distributors and retailers of consumer products distributed in commerce. A firm that obtains information that reasonably supports the conclusion that such a product:

(1) Fails to comply with an applicable consumer product safety rule or with a voluntary consumer product safety standard upon which the Commission has relied under section 9 of the CPSA,

(2) Contains a defect that could create a substantial product hazard as defined in section 15(a)(2) of the CPSA, 15 U.S.C. 2064(a)(2), or

(3) Creates an unreasonable risk of serious injury or death must immediately inform the Commission unless the firm has actual knowledge that the Commission has been adequately informed of the failure to comply, defect, or risk.

The purpose of reporting is to provide the Commission with the information it needs to determine whether remedial action is necessary to protect the public. To accomplish this purpose, section 15(b) contemplates that the Commission receive, at the earliest time possible, all available information that can assist it in evaluating potential product hazards. For example, in deciding whether to report a potential product defect, the law does not limit the obligation to report to those cases in which a firm has finally determined that a product in fact contains a defect that creates a substantial product hazard or has pinpointed the exact cause of such a defect. Rather, a firm must report if it obtains information which reasonably supports the conclusion that a product it manufactures and/or distributes contains a defect which could create such a hazard or that the product creates an unreasonable risk of serious injury or death. 15 U.S.C. 2064(b)(2) and (3); 16 CFR 1115.4 and 6.

Nothing in the reporting requirements of the CPSA or the Commission's interpretive regulation at 16 CFR Part 1115 limits reporting to information

derived solely from experience with products sold in the United States. The Commission's interpretative rule enumerates, at 16 CFR 1115.12(f), examples of the different types of information that a firm should consider in determining whether to report. The regulation does not exclude information from evaluation because of its geographic source. The Commission interprets the statutory reporting requirements to mean that, if a firm obtains information that meets the criteria for reporting listed above and that is relevant to a product it sells or distributes in the U.S., it must report that information to the CPSC, no matter where the information came from. Such information could include incidents or experience with the same or a substantially similar product, or a component thereof, sold in a foreign country.

Over the past several years, the Commission has received reports under section 15(b) that have included information on experience with products abroad, and, when appropriate, has initiated recalls based in whole or in part on that experience. Thus, a number of companies already view the statutory language as the Commission does. However, with the expanding global market, more firms are obtaining this type of information, but many may be unfamiliar with this aspect of reporting. Therefore, the Commission proposes to issue this policy statement to assist those firms in complying with the requirements of section 15(b) of the Consumer Product Safety Act.

The Commission is not required to seek public comment on what is a straight-forward reading of the CPSA. Nevertheless, because this is the first public announcement of this interpretation, the Commission is providing the public with this opportunity to comment prior to issuance of this policy statement.

Dated: December 28, 2000.

Sadye E. Dunn,

Secretary, Consumer Product Safety Commission.

[FR Doc. 01-134 Filed 1-2-01; 8:45 am]

BILLING CODE 6355-01-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Joint Advisory Committee on Nuclear Weapons Surety; Meeting

ACTION: Notice of Advisory Committee Meeting.

SUMMARY: The Joint Advisory Committee on Nuclear Weapons Surety will conduct a closed session on January 12, 2001 at Science Applications International Cooperation, San Diego, California.

The Joint Advisory Committee is charged with advising the Secretaries of Defense and Energy, and the Joint Nuclear Weapons Council on nuclear weapons surety matters. At this meeting the Joint Advisory Committee will receive classified briefings on nuclear weapons security and use control.

In accordance with the Federal Advisory Committee Act (Pub. L. 92-463, as amended, Title 5, U.S.C. App. II, (1988)), this meeting concerns matters sensitive to the interests of national security, listed in 5 U.S.C. 552b(c)(1) and accordingly this meeting will be closed to the public.

Dated: December 26, 2000.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 01-73 Filed 1-2-01; 8:45 am]

BILLING CODE 5001-10-M

DEPARTMENT OF EDUCATION

Notice of Proposed Information Collection Requests

AGENCY: Department of Education.

ACTION: Notice of proposed information collection requests.

SUMMARY: The Leader, Regulatory Information Management, Office of the Chief Information Officer, invites comments on the proposed information collection requests as required by the Paperwork Reduction Act of 1995.

DATES: An emergency review has been requested in accordance with the Act (44 U.S.C. Chapter 3507 (j)), since public harm is reasonably likely to result if normal clearance procedures are followed. Approval by the Office of Management and Budget (OMB) has been requested by January 5, 2001.

ADDRESSES: Written comments regarding the emergency review should be addressed to the Office of Information and Regulatory Affairs, Attention: Lauren Wittenberg, Acting Desk Officer: Department of Education, Office of Management and Budget; 725 17th Street, NW., Room 10235, New Executive Office Building, Washington, DC 20503.

SUPPLEMENTARY INFORMATION: Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that the Director of OMB provide interested Federal agencies and the

public an early opportunity to comment on information collection requests. The Office of Management and Budget (OMB) may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The Leader, Regulatory Information Management, Office of the Chief Information Officer, publishes this notice containing proposed information collection requests at the beginning of the Departmental review of the information collection. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g., new, revision, extension, existing or reinstatement; (2) Title; (3) Summary of the collection; (4) Description of the need for, and proposed use of, the information; (5) Respondents and frequency of collection; and (6) Reporting and/or Recordkeeping burden. ED invites public comment.

The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner, (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected, and (5) how might the Department minimize the burden of this collection on respondents, including through the use of information technology.

Dated: December 27, 2000.

John Tressler,

Leader, Regulatory Information Management, Office of the Chief Information Officer.

Office of Elementary and Secondary Education

Type of Review: New.

Title: Early Childhood Educator Professional Development Program.

Abstract: The Professional Development for Early Childhood Educators and Caregivers Grants are designed for one or more local educational service agencies, State educational agencies, State agencies for higher education, institutions of higher education, and other public and private agencies, organizations, and institutions to fund projects that provide professional development opportunities to improve the knowledge and skills of early childhood educators and caregivers who work in urban and rural

communities with high concentrations of young children living in poverty.

Additional Information: Due to the unexpected delay in passage of an appropriations law, ED is requesting an emergency review of this information collection in order to make awards in sufficient time for applicants to provide high-quality professional development programs by early summer 2001 when many early childhood educators and caregivers will be available to participate. Based upon the occurrence of this unanticipated event, and the public harm that might otherwise occur with delaying grant awards so that the opportunity is missed to provide professional development during summer 2001. OMB approval is requested by January 5, 2000, so that the application notice can be published and the application be made available to eligible applicants. We anticipate that this time schedule will allow eligible applicants 60 days to prepare grant applications, and the Department to award grants by mid-May.

Frequency: Annually.

Affected Public: State, Local, or Tribal Gov't, SEAs or LEAs; Not-for-profit institutions.

Reporting and Recordkeeping Hour Burden:

Responses: 100.

Burden Hours: 1,300.

Requests for copies of the proposed information collection request should be directed to Vivian Reese, Department of Education, 400 Maryland Avenue, SW., Room 4050, Regional Office Building 3, Washington, DC 20202-4651, or should be electronically mailed to the internet address OCIO_IMG_Issues@ed.gov, or should be faxed to 202-708-9346.

Comments regarding burden and/or the collection activity requirements, contact Kathy Axt at her internet address Kathy_Axt@ed.gov. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339.

[FR Doc. 01-58 Filed 1-2-01; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF EDUCATION

[CFDA No. 84.287]

21st Century Community Learning Centers; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2001

Purpose of Program: The 21st Century Community Learning Centers Program was established by Congress to award grants to rural and inner-city public

schools, or consortia of such schools, to enable them to plan, implement, or expand projects that benefit the educational, health, social services, cultural and recreational needs of the community. School-based community learning centers can provide expanded learning opportunities for children, youth and their families as well as a safe, drug-free, supervised and cost-effective afterschool, weekend or summer haven.

For fiscal year (FY) 2001 we strongly encourage applicants to design projects that focus on the invitational priority in the PRIORITIES section of this application notice.

Eligible Applicants: Only rural or inner-city public elementary or secondary schools, consortia of those schools, or local educational agencies (LEAs) applying on their behalf, are eligible to receive a grant under the 21st Century Community Learning Centers Program. An LEA considering serving more than one school is encouraged to submit a consortium application on their behalf. Grants awarded under the program may be used to plan, implement, or expand community learning centers. Applicants must demonstrate that they meet the statutory program purpose of serving either "rural" or "inner-city" schools or a consortium of such schools.

Applications Available: January 4, 2001.

Deadline for Transmittal of Applications: March 30, 2001.

Deadline for Intergovernmental Review: May 31, 2001.

Available Funds: Approximately \$205 million.

Estimated Range of Awards: \$35,000-\$2,000,000, depending on the number of Centers included in each grant application.

Estimated Average Size of Awards: \$500,000, for a grant that will support 4 Centers. The average funding for a single Center is \$125,000.

Estimated Number of Awards: Approximately 400 awards.

Project Period: Up to 36 months. Please note that all applicants for multi-year awards are required to provide detailed budget information for the total grant period requested. The Department will negotiate at the time of the initial award the funding level for each year of the grant award.

Note: The Department is not bound by any estimates in this notice.

Page Limit: The application narrative (Part IV of the application) is where you, the applicant, address the selection criteria reviewers use to evaluate your application. Applicants are strongly

encouraged to limit Part IV to the equivalent of no more than 20 pages.

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 75, 77, 79, 80, 81, 82, 85, and 86, and (b) the regulations in 34 CFR part 299.

Priorities

The Absolute Priority, published in the notice of final priorities for this program in the **Federal Register** on December 2, 1997 (62 FR 63773) and repeated below, applies to this competition. In addition, we give preference to applications that meet the Competitive Priority (34 CFR 75.105(c)(2)(ii) and 34 CFR 299.3(a)).

Absolute Priority: Under 34 CFR 75.105(c)(3), we consider only applications that meet the absolute priority in the next paragraph.

Activities To Expand Learning Opportunities: We fund only those applications for 21st Century Community Learning Centers grants that include, among the array of services required and authorized by the statute, activities that offer significant expanded learning opportunities for children and youth in the community and that contribute to reduced drug use and violence.

Invitational Priority: Within the absolute priority, Activities to Expand Learning Opportunities, in accordance with the Department of Education Appropriations Act, 2001, the Secretary strongly encourages applications that are submitted jointly by a local educational agency (or a consortium of local educational agencies) and at least one community-based organization that has experience in providing before-and afterschool services. We are particularly interested in applications that meet this invitational priority.

Under 34 CFR 75.105(c)(1) we do not give to an application that meets the invitational priority a competitive or absolute preference over other applications.

Competitive Priority: Under 34 CFR 75.105(c)(2)(i), we give preference to applications that meet the competitive priority described below.

Competitive Priority. Projects that will use a significant portion of the program funds to address substantial problems in an Empowerment Zone, including a Supplemental Empowerment Zone, or an Enterprise Community designated by the United States Department of Housing and Urban Development or the United States Department of Agriculture. We select an application that meets this priority over an

application of comparable merit that does not meet this competitive priority.

Note: A list of areas that have been designated as Empowerment Zones and Enterprise Communities is published as an appendix to this notice.

Applicable Funding Criteria: See application package.

SUPPLEMENTARY INFORMATION: The 21st Century Community Learning Centers Program is authorized under Title X, Part I (20 U.S.C. 8241) of the Elementary and Secondary Education Act. Grantees under this program must use grant funds to plan, implement, or expand community learning centers which are required to carry out at least four of the activities listed in section 10905 of the Elementary and Secondary Education Act (20 U.S.C. 8245), as listed below:

- (1) Literacy education programs;
- (2) Senior citizen programs;
- (3) Children's day care services;
- (4) Integrated education, health, social service, recreational, or cultural programs;
- (5) Summer and weekend school programs in conjunction with recreation programs;
- (6) Nutrition and health programs;
- (7) Expanded library service hours to serve community needs;
- (8) Telecommunications and technology education programs for individuals of all ages;
- (9) Parenting skills education programs;
- (10) Support and training for child day care providers;
- (11) Employment counseling, training, and placement;
- (12) Services for individuals who leave school before graduating from secondary school, regardless of the age of such individual; and
- (13) Services for individuals with disabilities.

Applicants should propose an array of inclusive and supervised services that include expanded learning opportunities (such as instructional enrichment programs, tutoring, or homework assistance) but may also include recreational, musical and artistic activities, and opportunities to use advanced technology, particularly for those community members who do not have access to computers or telecommunications at home.

Application Requirements. In accordance with the Department of Education Appropriations Act, 2001, applicants must describe in their application the elements of their projects that are designed to assist students to meet or exceed state and local standards in core academic subjects, as appropriate to the needs of the participating children.

For the purpose of the program, the term "community learning center" "means an entity within a public elementary or secondary school building that

"(1) provides educational, recreational, health, and social service programs for residents of all ages within a local community; and

"(2) is operated by a local educational agency in conjunction with local governmental agencies, businesses, vocational education programs, institutions of higher education, community colleges, and cultural, recreational, and other community and human service entities" (20 U.S.C. 8246).

Geographic distribution: In awarding grants, the Secretary assures an equitable distribution of assistance among the States, among urban and rural areas of a State, and among urban and rural areas of the United States (20 U.S.C. 8243(b)).

FOR FURTHER INFORMATION CONTACT:

Amanda Clyburn (Telephone: (202) 260-3804) or Peter Eldridge (Telephone: (202) 260-2514), U.S. Department of Education, 400 Maryland Avenue, SW., Washington, DC 20202-6175. E-mail: 21stCCLC@ed.gov.

If you use a telecommunications device for the deaf (TDD), you may call the Federal Information Relay Service (FIRS) at 1-800-877-8339.

For Applications Contact: Education Publications Center (ED Pubs), P.O. Box 1398, Jessup, MD 20794-1398. Telephone (toll free): 1-877-433-7827. FAX: (301) 470-1244. If you use a telecommunications device for the deaf (TDD), you may call (toll free): 1-877-576-7734.

You may also contact ED Pubs at its Web site: <http://www.ed.gov/pubs/edpubs.html>.

Or you may contact ED Pubs at its e-mail address: edpubs@inet.ed.gov

If you request an application from ED Pubs, be sure to identify this competition as follows: CFDA number 84.287.

Individuals with disabilities may obtain this document in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT**.

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To use the PDF you must have the Adobe Acrobat Reader, which is available free at either of the previous sites. If you have questions about using the PDF, call the U.S. Government Printing Office (GPO), toll free, at 1-888-293-6498; or in the Washington, D.C., area at (202) 512-1530.

Note: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: <http://www.access.gpo.gov/nara/index.html>.

Program Authority: 20 U.S.C. 8241-8246.

Dated: December 28, 2000.

Michael Cohen,

Assistant Secretary for Elementary and Secondary Education.

Appendix—Empowerment Zones and Enterprise Communities

Urban and Rural Empowerment Zones (indicates a rural zone)*

California: Los Angeles, Oakland, Santa Ana, Riverside County*
 Connecticut: New Haven
 Florida: Miami/Dade County
 Georgia: Atlanta, Cordele*
 Illinois: Chicago, East St. Louis, Ullin*
 Indiana: Gary, East Chicago
 Kentucky: Kentucky Highlands* (Clinton, Jackson, and Wayne Counties)
 Maryland: Baltimore
 Massachusetts: Boston
 Michigan: Detroit
 Minnesota: Minneapolis
 Mississippi: Mid-Delta* (Bolivar, Holmes, Humphreys, LeFlore, Sunflower, Washington Counties)
 Missouri/Kansas: Kansas City
 Missouri: St. Louis
 New Jersey: Cumberland County
 New York: New York (Harlem, Bronx)
 North Dakota: Lake Agassiz*
 Ohio: Cleveland, Cincinnati, Columbus
 Ohio/West Virginia: Ironton/Huntington
 Pennsylvania/New Jersey: Philadelphia/Camden
 South Carolina: Columbia/Sumter*
 South Dakota: Oglala Sioux Reservation in Pine Ridge*
 Tennessee: Knoxville
 Texas: Houston, El Paso, Rio Grande Valley* (Cameron, Hidalgo, Starr, and Willacy Counties)
 Virginia: Norfolk/Portsmouth

Urban and Rural Enterprise Communities (indicates a rural community)*

Alabama: Birmingham, Chambers County*, Greene County*, Sumter County*

Alaska: Juneau*

Arizona: Arizona Border* (Cochise, Santa Cruz and Yuma Counties), Phoenix, Window Rock*

Arkansas: East Central* (Cross, Lee, Monroe, and St. Francis Counties), Mississippi County*, Pulaski County

California: Imperial County*, Los Angeles, Huntington Park, San Diego, San Francisco, Bayview, Hunter's Point, Watonsville*, Orange Cove*

Colorado: Denver

Connecticut: Bridgeport, New Haven

Delaware: Wilmington

District of Columbia: Washington

Florida: Jackson County*, Miami, Dade County, Tampa, Immokalee*

Georgia: Albany, Central Savannah River* (Burke, Hancock, Jefferson, McDuffie, Taliaferro, and Warren Counties), Crisp County*, Dooley County*

Hawaii: Kaunakakai*

Illinois: East St. Louis, Springfield

Indiana: Indianapolis, Austin*

Iowa: Des Moines

Kansas: Leoti*

Kentucky: Louisville, Bowling Green*

Louisiana: Macon Ridge* (Catahoula, Concordia, Franklin, Morehouse, and Tensas Parishes), New Orleans, Northeast Louisiana Delta* (Madison Parish), Ouachita Parish

Maine: Lewiston*

Massachusetts: Lowell, Springfield

Michigan: Five Cap*, Flint, Muskegon, Harrison*

Minnesota: Minneapolis, St. Paul

Mississippi: Jackson, North Delta Area* (Panola, Quitman, and Tallahatchie Counties)

Missouri: East Prairie*, St. Louis

Montana: Poplar*

Nebraska: Omaha

Nevada: Clarke County, Las Vegas

New Hampshire: Manchester

New Jersey: Newark

New Mexico: Albuquerque, La Jicarita* (Mora, Rio Arriba, Taos Counties), Deming*

New York: Albany, Schenectady, Troy, Buffalo, Newburg, Kingston, Rochester

North Carolina: Charlotte, Edgecombe, Halifax, Wilson*, Robeson Counties

Ohio: Akron, Columbus, Greater Portsmouth* (Scioto County)

Oklahoma: Choctaw, McCurtain Counties*, Oklahoma City, Ada*

Oregon: Josephine County*, Portland

Pennsylvania: Lock Haven*, Harrisburg, Pittsburgh, Uniontown*

Rhode Island: Providence

South Carolina: Hallandale*, Charleston, Williamsburg, Florence County*

South Dakota: Beadle, Spink Counties*

Tennessee: Fayette*, Haywood Counties*, Memphis, Nashville, Rutledge*

Tennessee/Kentucky: Scott, McCreary Counties*

Texas: Dallas, El Paso, San Antonio, Waco, Uvalde*

Utah: Ogden

Vermont: Burlington

Virginia: Accomack* (Northampton County), Norfolk

Washington: Lower Yakima County*, Seattle, Tacoma, Collie*

West Virginia: Charleston*, Huntington, McDowell County*, West Central Appalachia* (Braxton, Clay, Fayette, Nicholas, and Roane)

Wisconsin: Milwaukee, Keshena*

[FR Doc. 01-128 Filed 1-2-01; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF EDUCATION

[CFDA No. 84.120A]

Office of Postsecondary Education; Minority Science and Engineering Improvement Program; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2001

Purpose of Program: The Minority Science and Engineering Improvement Program (MSEIP) is designed to effect long-range improvement in science and engineering education at predominantly minority institutions and to increase the flow of underrepresented ethnic minorities, particularly minority women, into scientific careers.

Eligibility for Grants: Under Section 361 of Title III of the Higher Education Act (HEA), as amended, the following entities are eligible to receive a grant under the MSEIP:

(1) Public and private nonprofit institutions of higher education that:

- (A) Award baccalaureate degrees; and
- (B) Are minority institutions;

(2) Public or private nonprofit institutions of higher education that:

- (A) Award associate degrees; and
- (B) Are minority institutions that:

- (i) Have a curriculum that includes science or engineering subjects; and

- (ii) Enter into a partnership with public or private nonprofit institutions of higher education that award baccalaureate degrees in science and engineering;

(3) Nonprofit science-oriented organizations, professional scientific societies, and institutions of higher education that award baccalaureate degrees, that:

- (A) Provide a needed service to a group of minority institutions; or

- (B) Provide in-service training for project directors, scientists, and engineers from minority institutions;

(4) Consortia of organizations that provide needed services to one or more minority institutions, the membership of which may include:

- (A) Institutions of higher education that have a curriculum in science and engineering;

- (B) Institutions of higher education that have a graduate or professional program in science or engineering;

- (C) Research laboratories of, or under contract with, the Department of Energy;

(D) Private organizations that have science or engineering facilities; or

(E) Quasi-governmental entities that have a significant scientific or engineering mission.

Eligible Applicants: (a) For institutional, design, and special projects described respectively in 34 CFR 637.14 (a), (b), and (c): public and nonprofit private minority institutions as defined in section 361 (1) and (2) of the HEA.

(b) For special projects described in 34 CFR 637.14 (b) and (c): nonprofit organizations, institutions, and consortia as defined in section 361(3) and (4) of the HEA.

(c) For cooperative projects described in 34 CFR 637.15: groups of nonprofit accredited colleges and universities whose primary fiscal agent is an eligible minority institution as defined in 34 CFR 637.4(b).

Notes: 1. A minority institution is defined in 34 CFR 637.4(b) as an accredited college or university whose enrollment of a single minority group or combination of minority groups, as defined in 34 CFR 637.4(b), exceeds 50 percent of the total enrollment.

2. Section 365(4) of the HEA now defines the term "science" to include "behavior science."

Applications Available: February 2, 2001.

Deadline for Transmittal of Applications: March 19, 2001.

Deadline for Intergovernmental Review: May 18, 2001.

Estimated Available Funds: \$8,500,000.

Estimated Range of Awards: \$15,000–\$500,000.

Estimated Average Size of Awards: The amounts referenced are advisory and represent the Department's best estimate at this time. The average size of an award is the estimate for a single-year project or for the first budget period of a multi-year project.

Institutional

Estimated Range of Awards: \$100,000–\$200,000.

Estimated Average Size of Awards: \$120,000.

Estimated Number of Awards: 23.

Design

Estimated Range of Awards: \$15,000–\$20,000.

Estimated Average Size of Awards: \$19,000.

Estimated Number of Awards: 3.

Special

Estimated Range of Awards: \$20,000–\$150,000.

Estimated Average Size of Awards: \$75,000.

Estimated Number of Awards: 12.

Cooperative

Estimated Range of Awards: \$100,00–\$500,000.

Estimated Average Size of Awards: \$280,000.

Estimated Number of Awards: 3.

Estimated Number of Awards: 41.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 79, 83, 86, 97, 98, and 99; and (b) The regulations for this program in 34 CFR part 637.

Note: The regulations in 34 CFR part 86 apply to institutions of higher education only.

FOR APPLICATIONS AND FURTHER INFORMATION CONTACT:

Mr. Kenneth Waters or Ms. Deborah Newkirk, Institutional Development and Undergraduate Education Service, U.S. Department of Education, 1990 K Street, NW, 6th Floor, Washington, DC 20006–8517. Telephone: (202) 502–7591 or via Internet: deborah_newkirk@ed.gov.

The government encourages applicants to FAX requests for applications to (202) 502–7861.

If you use a telecommunications device for the deaf (TDD), you may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

Individuals with disabilities may obtain this document in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to the program contact persons listed under **FOR APPLICATIONS AND FURTHER INFORMATION CONTACT**.

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Program Authority: 20 U.S.C. 1067–1067k.

Dated: December 27, 2000.

A. Lee Fritschler,

Assistant Secretary, Office of Postsecondary Education.

[FR Doc. 01–129 Filed 1–2–01; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Office of Science; Office of Science Financial Assistance Program Notice 01–15: Energy Biosciences

AGENCY: U.S. Department of Energy (DOE).

ACTION: Notice inviting grant applications.

SUMMARY: The Office of Basic Energy Sciences of the Office of Science (SC), U.S. Department of Energy (DOE) invites preapplications from potential applicants for research funding in the Energy Biosciences program area. The intent in asking for a preapplication is to save the time and effort of applicants in preparing and submitting a formal project application that may be inappropriate for the program. The preapplication should consist of a two to three page concept paper that focuses on the scientific objectives and basic research approaches planned. No budget information or biographical data need be included; nor is an institutional endorsement necessary. The preapplication gives us the opportunity to advise potential applicants on the suitability of the scope of the research proposed to the mission of the DOE Energy Biosciences program. A response indicating the appropriateness of submitting a formal application will be sent from the Energy Biosciences program office in time to allow for an adequate preparation period for a formal application.

DATES: For timely consideration, all preapplications should be received by March 1, 2001. However, earlier submissions will be gladly accepted. A response to timely preapplications will be communicated to the applicant by April 12, 2001. The deadline for receipt of formal applications is June 13, 2001.

ADDRESSES: Preapplications referencing Program Notice 01–15 should be forwarded to: U.S. Department of Energy, Office of Basic Energy Sciences,

SC–143, Chemical Sciences, Geosciences and Biosciences Division, 19901 Germantown Road, Germantown, MD 20874–1290, Attn: Program Notice 01–15. Fax submissions are acceptable (Fax Number (301) 903–1003).

Formal applications, referencing Program Notice 01–15, must be sent to: U.S. Department of Energy, Office of Science, Grants and Contracts Division, SC–64, 19901 Germantown Road, Germantown, MD 20874–1290, ATTN: Program Notice 01–15. This address must also be used when submitting applications by U.S. Postal Service Express Mail or any commercial overnight delivery service, or when hand-carried by the applicant.

FOR FURTHER INFORMATION CONTACT: Ms. Pat Snyder, Chemical Sciences, Geosciences and Biosciences Division, Office of Basic Energy Sciences, SC–143, 19901 Germantown Road, Germantown, MD 20874–1290, telephone (301) 903–2873; E-mail pat.snyder@science.doe.gov.

SUPPLEMENTARY INFORMATION: Potential applicants should submit a brief preapplication which consists of two to three pages of narrative describing research objectives. These will be reviewed relative to the scope and the research needs of the Energy Biosciences program. The principal purpose in using preapplications is to reduce the expenditure of time and effort of all parties.

The Energy Biosciences program has the mission of generating knowledge about plants and non-medical related microorganisms that provide scientific foundations for future energy related biotechnologies. The objective is to pursue basic biochemical, genetic and physiological investigations that may contribute towards providing alternate fuels, petroleum replacement products, energy conservation measures as well as other technologies related to DOE programs. Areas of interest include bioenergetic systems, including photosynthesis; control of plant growth and development, including metabolic, genetic, and hormonal and ambient factor regulation, metabolic diversity, ion uptake, transport and accumulation, stress physiology and adaptation; genetic transmission and expression; plant-microbial interactions; plant cell wall structure and function; lignocellulose degradative mechanisms; mechanisms of fermentations, genetics of neglected microorganisms, energetics and membrane phenomena; thermophily (molecular basis of high temperature tolerance); microbial interactions; and one-carbon metabolism, which is the basis of

biotransformations such as methanogenesis. The program also encourages fundamental research in the biological sciences that interfaces with other traditional disciplines in the physical sciences. The objective is to discern and understand basic mechanisms and principles.

Funds are expected to be available for new grant awards in FY 2002. The magnitude of these funds available and the number of awards, which can be made, will depend on the budget process. The awards made during FY 2000 averaged close to \$105,000 per year, mostly for a three-year duration.

When a formal application is made, it must be 10 pages or less, exclusive of figure illustrations, and include the hypotheses being tested and the proposed experimental design. Additional pages must include a one-page abstract or summary of the proposed research, curriculum vitae, a listing of all current and pending federal support, and letters of intent when collaborations are part of the proposed research.

Information about development and submission of applications, eligibility, limitations, evaluations and selection processes, and other policies and procedures may be found in the 10 CFR Part 605 and the Application Guide for the Office of Science Financial Assistance Program. Electronic access to SC's Financial Assistance Guide is possible via the Internet using the following Web Site address: <http://www.sc.doe.gov/production/grants/grants.html>.

DOE is under no obligation to pay for any costs associated with the preparation or submission of applications if an award is not made.

The Catalog of Federal Domestic Assistance number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Issued in Washington, DC on December 19, 2000.

John Rodney Clark,

Associate Director of Science for Resource Management.

[FR Doc. 01-77 Filed 1-2-01; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY

Office of Science

Office of Science Financial Assistance Program Notice 01-10: Scientific Discovery Through Advanced Computing—Advanced Computational Research in Fusion Science

AGENCY: U.S. Department of Energy (DOE).

ACTION: Notice inviting research grant applications.

SUMMARY: The Office of Fusion Energy Sciences (OFES) of the Office of Science (SC), U.S. Department of Energy (DOE) hereby announces its interest in receiving grant applications for the development of scientific simulation codes needed to address complex problems in fusion energy sciences. The goal is the creation of codes that achieve high performance on a single node, scale to hundreds of nodes and thousands of processors, and have the potential to be ported to future generations of high performance computers. This announcement is focused on some of the topical areas that are important to developing integrated models of fusion systems and require the capabilities of terascale computers. Specific areas of interest include:

- Turbulence and transport in order to predict energy and particle confinement in plasmas,
- Macroscopic equilibrium and stability to be able to predict stability limits in magnetically confined plasmas,
- Magnetic reconnection in order to understand the dynamo and "sawtooth" oscillations in plasmas,
- Electromagnetic wave/particle interactions to be able to predict heating and current drive in plasmas,
- Boundary layer effects in plasmas in order to predict the transport of heat and particles in the edge region of a fusion device, and
- Electromagnetic fields and beam dynamics in particle accelerators to model efficient, high-current heavy ion accelerators.

The full text of Program Notice 01-10 is available via the Internet at the following web site address: <http://www.science.doe.gov/production/grants/grants.html>.

DATES: Preapplications referencing this program notice must be received by 4:30 P.M. EST, January 31, 2001. A response encouraging or discouraging the submission of a formal application will be communicated by e-mail within 14 days.

Formal applications submitted in response to this notice must be received

no later than 4:30 P.M., March 15, 2001, to be accepted for merit review and consideration for award in Fiscal Year 2001.

ADDRESSES: Preapplications referencing Program Notice 01-10 should be forwarded to: U.S. Department of Energy, Office of Science, Office of Fusion Energy Sciences, SC-55, 19901 Germantown Road, Germantown, Maryland 20874-1290, ATTN: John Sauter. Preapplications can also be submitted via E-mail at the following E-mail address:

john.sauter@science.doe.gov Formal applications referencing Program Notice 01-10 should be forwarded to: U.S. Department of Energy, Office of Science, Grants and Contracts Division, SC-64, 19901 Germantown Road, Germantown, Maryland 20874-1290, ATTN: Program Notice 01-10. The above address must be used when submitting applications by U.S. Postal Service Express Mail, any commercial mail delivery service, or when hand-carried by the applicant. An original and seven copies of the application must be submitted.

FOR FURTHER INFORMATION CONTACT: Dr. Stephen Eckstrand or Dr. Arnold Kritz, Office of Fusion Energy Sciences, SC-55, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290. Telephone numbers and e-mail addresses are listed below:

Stephen Eckstrand: telephone (301) 903-5546, e-mail steve.eckstrand@science.doe.gov

Arnold Kritz: telephone (301) 903-2027, e-mail arnold.kritz@science.doe.gov

SUPPLEMENTARY INFORMATION:

Background: Scientific Discovery Through Advanced Computing

Advanced scientific computing will be a key contributor to scientific research in the 21st Century. Within the Office of Science (SC), scientific computing programs and facilities are already essential to progress in many areas of research critical to the nation. Major scientific challenges exist in all SC research programs that can best be addressed through advances in scientific supercomputing, e.g., designing materials with selected properties, elucidating the structure and function of proteins, understanding and controlling plasma turbulence, and designing new particle accelerators. To help ensure its missions are met, SC is bringing together advanced scientific computing and scientific research in an integrated program entitled "Scientific Discovery through Advanced Computing."

The Opportunity and the Challenge

Extraordinary advances in computing technology in the past decade have set the stage for a major advance in scientific computing. Within the next five to ten years, computers 1,000 times faster than today's computers will become available. These advances herald a new era in scientific computing. Using such computers, it will be possible to dramatically extend our exploration of the fundamental processes of nature (e.g., the structure of matter from the most elementary particles to the building blocks of life) as well as advance our ability to predict the behavior of a broad range of complex natural and engineered systems (e.g., the earth's climate or an automobile engine).

To exploit this opportunity, these computing advances must be translated into corresponding increases in the performance of the scientific codes used to model physical, chemical, and biological systems. This is a daunting problem. Current advances in computing technology are being driven by market forces in the commercial sector, not by scientific computing. Harnessing commercial computing technology for scientific research poses problems unlike those encountered in previous supercomputers, in magnitude as well as in kind. As noted in the 1998 report¹ from the NSF/DOE "National Workshop on Advanced Scientific Computing" and the 1999 report² from the President's Information Technology Advisory Committee, this problem will only be solved by increased investments in computer software—in research and development of scientific simulation codes as well as on the mathematical and computing systems software that underlie these codes.

Investment Plan of the Office of Science

To meet the challenge posed by the new generation of terascale computers, SC will fund a set of coordinated investments as outlined in its long-range plan for scientific computing, *Scientific Discovery through Advanced Computing*,³ submitted to Congress on March 30, 2000. First, it will create a Scientific Computing Software

Infrastructure that bridges the gap between the advanced computing technologies being developed by the computer industry and the scientific research programs sponsored by the Office of Science. Specifically, the SC effort proposes to:

- Create a new generation of Scientific Simulation Codes that take full advantage of the extraordinary computing capabilities of terascale computers.
- Create the Mathematical and Computing Systems Software to enable the Scientific Simulation Codes to effectively and efficiently use terascale computers.
- Create a Collaboratory Software Environment to enable geographically separated scientists to effectively work together as a team and to facilitate remote access to both facilities and data.

These activities are supported by a Scientific Computing Hardware Infrastructure that will be tailored to meet the needs of SC's research programs. The Hardware Infrastructure is robust, to provide the stable computing resources needed by the scientific applications; agile, to respond to innovative advances in computer technology that impact scientific computing; and flexible, to allow the most appropriate and economical resources to be used to solve each class of problems. Specifically, the SC proposes to support:

- A Flagship Computing Facility, the National Energy Research Scientific Computing Center (NERSC), to provide the robust, high-end computing resources needed by a broad range of scientific research programs.
- Topical Computing Facilities to provide computing resources tailored for specific scientific applications and to serve as the focal point for an application community as it strives to optimize its use of terascale computers.
- Experimental Computing Facilities to assess the promise of new computing technologies being developed by the computer industry for scientific applications.

Both sets of investments will create exciting opportunities for teams of researchers from laboratories and universities to create new revolutionary computing capabilities for scientific discovery.

The Benefits

The Scientific Computing Software Infrastructure, along with the upgrades to the hardware infrastructure, will enable laboratory and university researchers to solve the most challenging scientific problems faced by the Office of Science at a level of

accuracy and detail never before achieved. These developments will have significant benefits to all of the government agencies that rely on high-performance scientific computing to achieve their mission goals as well as to the U.S. high-performance computing industry.

Background: Advanced Computational Research in Fusion Science

The Office of Fusion Energy Sciences supports a directed, basic research program to understand the elementary processes in plasmas and to use this knowledge to explore innovative approaches for confining fusion plasmas. Theoretical and computational plasma physics are critical to a fundamental understanding of plasmas, and much progress has been made during the past 25 years. The solicitation is focused on accelerating progress toward developing a quantitative understanding of nonlinear, non-equilibrium plasma systems.

The scope and complexity of the proposed projects will require close collaboration among researchers from the computational and theoretical plasma physics, computer science and applied mathematics disciplines. Accordingly, this solicitation calls for the creation of topical centers as the organizational basis for a successful application. A topical center is a multi-institutional, multi-disciplinary team that will:

- Create scientific simulation codes that take full advantage of terascale computers,
- Work closely with other SciDAC teams to ensure that the best available mathematical algorithms and computer science methods are employed, and
- Manage the work of the center in a way that will foster good communication and decision making (see section on Collaboration and Coordination below).

Partnerships among universities, national laboratories, and industry are encouraged.

Applications are being sought in the six topical areas listed below.

1. Turbulence and transport: An understanding of plasma turbulence is a prerequisite to the development of first-principles models of anomalous transport in magnetically confined plasmas. The development of accurate models for plasma turbulence and the availability of more powerful, massively parallel computers will enable comparison with experimental data in greater detail than has been achieved to date. In particular, comparisons for realistic experimental conditions, including profile effects, finite beta,

¹ This workshop was sponsored by the National Science Foundation and the Department of Energy and hosted by the National Academy of Sciences on July 30–31, 1998. Copies of the report may be obtained from: <http://www.er.doe.gov/production/octr/mics/index.html>

² Copies of the PITAC report may be obtained from <http://www.ccic.gov/ac/report/>.

³ Copies of the SC computing plan, *Scientific Discovery through Advanced Computing*, can be downloaded from the SC web site at: <http://www.sc.doe.gov/production/octr/index.html>.

flow shear, and electron effects will lead to a better understanding of the relation between plasma turbulence and anomalous transport. The development of synthetic diagnostic tools and use of scientific visualization capabilities can facilitate this. Applications are solicited for the development of large-scale particle-in-cell (PIC) codes and continuum codes needed to understand turbulence and transport. The effort may include the development of a full-torus, continuum code. It is expected that the PIC codes will include the physics associated with kinetic electrons and electromagnetic fields, and that research will proceed on including neoclassical effects in continuum codes. An important element is understanding and reducing the differences between results obtained with PIC codes and continuum codes. Also there should be a focus on reducing code redundancy and on using object oriented techniques to facilitate code modernization and collaborative software development.

2. Macroscopic equilibrium and stability: Computational methods based on sets of magneto-fluid equations for magnetized plasma that includes the effects of realistic geometry and boundary conditions will improve the efficiency, realism and accessibility of 3-D magneto-fluid models of fusion plasmas. The nearly collisionless nature of high temperature plasmas can be taken into account by supplementing the fluid equations with particle-based closures of the moment equations. Development of user-friendly codes can be utilized to pioneer new applications in plasma and fusion science. For example, magneto-hydrodynamics should predict when sawtooth crashes and large-scale disruptions will occur. Applications are solicited for the development of large-scale 3-D magneto-fluid codes needed to understand large-scale phenomena in fusion plasmas. Test problems used to compare and validate computational models can also be employed to elucidate important physics. Goals include improving computational efficiency, integrating data management and visualization tools into the codes, addressing important programmatic problems in fusion science, and advancing understanding of fundamental plasma processes of wider scientific interest such as plasma relaxation and self-organization. Focus on utilizing modern computational techniques, such as object oriented programming, can facilitate code modernization and collaborative software development.

3. Magnetic reconnection: Magnetic reconnection is the process in a magnetized plasma system that converts

magnetic energy into high-speed flows and thermal energy. Because it is the basis of an important plasma transport mechanism, it impacts many plasma systems ranging from laboratory experiments to the Earth's magnetosphere, the solar corona and the astrophysical environment. Exploration of diamagnetic stabilization, both in the linear and nonlinear phase of reconnection, is essential to understand the onset of reconnection in fusion experiments. Applications are solicited for a coordinated effort that will focus on the critical scientific issues required to model and understand magnetic reconnection in the high temperature plasmas of fusion interest and the plasmas of interest to the space and astrophysical communities. The project may involve the development of new techniques for treating multi-scale phenomena such as adaptive mesh refinement and the dynamic embedding of kinetic models. It is anticipated that the use of slab geometry and a comparison of a variety of different models will allow identification of the essential physics required in the description of reconnection in high temperature plasmas. The development of adaptive mesh algorithms applied to the localized regions where the components of the magnetic field reverse, and utilized in multi-fluid codes may facilitate the modeling of high temperature plasma systems with real parameters. The computational effort may yield simulation results for direct comparison with laboratory experiments. By including the full geometry of laboratory experiments in the simulations, it may be possible to explain the observation that in a hot toroidal plasma, despite the absence of complete reconnection, the plasma energy from the entire core is expelled. Focus on utilizing modern computational techniques, such as object oriented programming, can facilitate code modernization and collaborative software development.

4. Electromagnetic wave/particle interactions: Utilization of massively parallel processing will allow accurate predictive understanding of electromagnetic wave processes affecting heating, current drive, stability, and transport in fusion relevant plasmas. It is recognized that electromagnetic waves have the potential to penetrate high temperature plasmas and provide control of the various interacting processes at work in fusion plasmas. Wave-plasma interactions are described by large systems of partial differential equations of a complicated type that are neither

elliptic nor hyperbolic. These systems of equations provide a challenging test bed for new iterative matrix inversion techniques. Applications are solicited for a coordinated effort to develop a mode conversion code that is self-consistently linked with antenna-wave coupling modules. This code should self-consistently include the plasma dielectric response due to wave-driven evolution of the particle distribution function on longer time scales. Massively parallel processor platforms are to be used to determine self-consistently phenomena that are important in the interaction between waves and plasma particles, for example, wave coupling, propagation, absorption, and wave-driven equilibrium evolution. There should be a focus on reducing code redundancy and on using object oriented techniques to facilitate code modernization and collaborative software development.

5. Boundary layer effects in plasmas: The performance of tokamaks, and other toroidal magnetic devices, is dependent on the dynamics of the edge region, which is the region that connects the hot core plasma through the separatrix to the material surface of the first wall. The edge region affects a whole variety of scientific issues ranging from confinement of hot fusion plasma to plasma-wall interactions and the technology of the first-wall design. Advances in understanding the non-linear edge plasma phenomena through development of appropriate modeling tools would be most beneficial. A major plasma science challenge results from the unique properties of edge plasmas. These unique properties include the widely varying space and time scales, the interplay between closed and open magnetic field lines, and physical processes that include atomic physics and both plasma-neutral and plasma-wall interactions. Applications are solicited for a coordinated research effort to utilize and develop tools that will aid in fundamental understanding of edge plasma turbulence and transport. Initial efforts may involve validation and verification of existing codes through in depth comparisons with one another, with existing edge databases, and with analytic theory. There should be a focus on reducing code redundancy and on using object oriented techniques to facilitate code modernization and collaborative software development. The resulting community based code should incorporate full geometry, macroscopic transport, kinetic effects, and plasma-neutral interactions. With the use of efficient parallel solvers and other

advanced numerical techniques, well-resolved simulations of the edge plasma should result.

6. *Electromagnetic fields and beam dynamics in particle accelerators*: The physics of intense ion beams needed for Inertial Fusion Energy is both rich and subtle, due to the kinetic and nonlinear nature of the system and the wide range in spatial and temporal scales involved. Effects associated with both instabilities and non-ideal processes must be understood. 3-D chamber calculations are required in order to provide a realistically complete model of the chamber environment. These calculations would allow exploration of various propagation modes. By employing multiple modes, it is possible to compare implicit electromagnetic methods, which can eliminate fast time scales not essential to the physics, and explicit electromagnetic methods. In the accelerator, the beam dynamics is nearly collisionless and Liouvillean, and as a result emittance growth primarily takes place through complicated distortions, driven by collective behaviors, imperfect applied fields, image fields from nearby conductors and inter-beam forces. With development of qualitatively improved tools it would be possible to establish much deeper understanding of these processes. Applications are solicited to develop a source-to-target simulation capability. This includes simulations of acceleration and confinement of the space-charge-dominated ion beams through the driver; electromagnetic and magneto-inductive simulations which describe the beam and fusion chamber environment, including multi-beam, neutralization, stripping, beam and plasma ionization processes, and return current effects; and simulations which can examine electron effects and collective modes in the driver and chamber. The code development may involve adoption of existing codes to run on computers that use a hybrid of shared and distributed memory, production of new and improved numerical algorithms, *e.g.*, averaging techniques that allow larger time-steps, and improved physics models. It is anticipated that modern scripting techniques for steering the code and advanced data visualization tools may be employed.

Collaboration and Coordination

It is expected that all applications submitted in response to this notice will be for collaborative centers involving more than one institution. Applications submitted from different institutions, which are directed at a common

research activity, may include a common technical description of the overall research project but must have a qualified principal investigator, who is responsible for the part of the effort at each institution, and separate face pages and budget pages for each institution. In addition, if the distinct scope of work proposed for each institution is not specified in the common technical description, it must be clearly stated in the individual proposals. Applicants should include cost sharing whenever feasible. Synergistic collaborations with researchers in federal laboratories and Federally Funded Research and Development Centers (FFRDCs), including the DOE National Laboratories are encouraged, though no funds will be provided to these organizations under this Notice. Further information on preparation of collaborative proposals is available in the Application Guide for the Office of Science Financial Assistance Program that is available via the Internet at: <http://www.science.doe.gov/production/grants/Colab.html>.

Since each center will be developing new computational tools and physics models that could be useful to other centers, it is important that there be good communication between the different centers. Also, it is important to have some guidance on code capabilities and development priorities from the broader fusion, scientific and computational communities. To facilitate this process the Office of Fusion Energy Sciences has established a community governed Plasma Science Advanced Scientific Computation Institute. This institute will be responsible for organizing regular coordination meetings and annual progress reviews. It will also coordinate development of priorities for future work and ensure good communication between the fusion centers and the other SciDAC activities.

Preapplications

Each potential applicant is strongly encouraged to submit a brief preapplication that consists of a two to three page narrative describing the proposed research, including research objectives and technical approach(s). Each preapplication should include a cover sheet with the title of the project, principal investigator, other senior personnel, institutions involved, and the name, telephone number, and e-mail address of the principal investigator. In addition, brief, one-page vitae should be submitted for the principal investigator and other senior personnel involved in the proposed center. Preapplications will be evaluated to assess their

programmatic relevance, and a response will be provided to the principal investigator within 14 days of receipt. However, notification of a successful preapplication is not an indication that an award will be made in response to a formal application.

Program Funding

Approximately \$1,700,000 of Fiscal Year 2001 funding will be available for grant awards in FY 2001. Additional funding for the proposed project may be available through the Office of Advanced Scientific Computing Research for closely related research in computer science and/or applied mathematics. Applications may request support for up to three years, with out-year support contingent on the availability of funds and satisfactory progress. To support multi-disciplinary, multi-institutional efforts, funding levels of \$0.6 million to \$1.2 million may be requested for the first year of the project, with higher funding levels possible in future years.

As required by the SC grant application guide, applicants must submit their budgets using the Budget Page (DOE Form 4620.1) with one Budget Page for each year of requested funding. The requested funding for the proposed work in computer science and applied mathematics should be included with the other project costs on the Budget Page. However, applicants are also requested to list the proposed computer science and applied mathematics costs separately in an appendix, as the Office of Advanced Scientific Computing Research may support this part of the work (up to 20–25% of the total project cost). The Office of Fusion Energy Sciences expects to fund two or three centers, depending on the size of the awards.

Applications

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following criteria listed in descending order of importance as codified in 10 CFR 605.10(d) (www.science.doe.gov/production/grants/605index.html):

1. Scientific and/or technical merit of the project;
2. Appropriateness of the proposed method or approach;
3. Competency of the applicant's personnel and adequacy of the proposed resources;
4. Reasonableness and appropriateness of the proposed budget.

The evaluation of applications under item 1, Scientific and Technical Merit, will pay particular attention to:

(a) The importance of the proposed project to the mission of the Office of Fusion Energy Sciences;

(b) The potential of the proposed project to advance the state-of-the-art in computational modeling and simulation of plasma behavior;

(c) The need for extraordinary computing resources to address problems of critical scientific importance to the fusion program and the demonstrated abilities of the applicants to use terascale computers; and

(d) The likelihood that the models, algorithms, and methods, that result from this effort will have impact on science disciplines outside of fusion research.

The evaluation under item 2, Appropriateness of the Proposed Method or Approach, will also consider the following elements related to Quality of Planning:

(a) Quality of the plan for effective collaboration among members of the center;

(b) Quality of plan for ensuring communication with other advanced computation efforts;

(c) Viability of plan for verifying and validating the models developed, including close coupling with experiments for ultimate validation; and

(d) Quality and clarity of proposed work schedule and deliverables.

Note that external peer reviewers are selected with regard to both their scientific expertise and the absence of conflict-of-interest issues. Non-federal reviewers may be used, and submission of an application constitutes agreement that this is acceptable to the investigator(s) and the submitting institution.

General information about development and submission of applications, eligibility, limitations, evaluations and selection processes, and other policies and procedures may be found in the Application Guide for the Office of Science (SC) Financial Assistance Program and in 10 CFR Part 605. Electronic access to SC's Financial Assistance Guide and required forms is made available via the Internet using the following Web site address: <http://www.science.doe.gov/production/grants/grants.html>.

In addition, for this notice, project descriptions must be 25 pages or less, including tables and figures, but excluding attachments. The application must also contain an abstract or project summary, letters of intent from all non-funded collaborators, and short curriculum vitae of all senior personnel. On the SC grant Face Page (DOE Form 4650.2), in block 15, also provide the

PI's phone number, FAX number, and e-mail address.

The Catalog of Federal Domestic Assistance Number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Issued in Washington, DC on December 21, 2000.

Ralph H. De Lorenzo,

Acting Associate Director of Science for Resource Management.

[FR Doc. 01-78 Filed 1-2-01; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP01-50-000]

The Montana Power Company; The Montana Power, L.L.C.; Notice of Application T Transfer Natural Gas Act Section 3 Authorization and Presidential Permit

December 27, 2000.

Take notice that on December 18, 2000, The Montana Power Company (MPC), 40 East Broadway, Butte, Montana 59701, and The Montana Power, L.L.C. (LLC), 40 East Broadway, Butte, Montana 59701, submitted an application to transfer from MPC to LLC Natural Gas Act Section 3 authorization and a Presidential Permit to use and operate MPC's Carway, Montana border facilities so as to effectuate a change in MPC's legal form. The details of the request are more fully set forth in the application which is on file with the Commission and open to public inspection. The filing may be viewed at <http://www.ferc.fed.us/online/rims.htm> (call 202-208-2222 for assistance).

The border facilities to be transferred consist of that portion of the 16-inch pipeline, extending approximately 51 miles from Cut Bank, Montana, to the international boundary between the United States and Canada in Section 2, Township 37 North, Range 13 West in Glacier County, Montana, where it connects with a 16-inch Canadian Montana Pipeline Company pipeline extending northwest into the Province of Alberta, Canada.

Questions regarding the details of this proposed project should be directed to William A. Pascoe, Vice-President—Transmission Services, The Montana Power Company, 40 East Broadway, Butte, Montana 59701, (406) 497-4212 (telephone) and (406) 497-2150 (fax); Douglas M. Canter, McCarthy, Sweeney & Harkaway, P.C., 2175 K Street, N.W. Suite 600, Washington, D.C. 20037, (202) 393-5710 (telephone) and (202)

393-5721 (fax); or Marjorie L. Thomas, Legal Department, The Montana Power Company, 40 East Broadway, Butte, Montana 59701, (406) 497-2314 (telephone) and (406) 497-2451 (fax).

There are two ways to become involved in the Commission's review of this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before January 22, 2001, file with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulation under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. A party must submit 14 copies of filings made with the Commission and must mail a copy to the applicant and to every other party in the proceeding. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will consider these comments in determining the appropriate action to be taken, but the filing of a comment alone will not serve to make the filer a party to the proceeding. The Commission's rules require that persons filing comments in opposition to the project provide copies of their protests only to the party or parties directly involved in the protest.

Comments and protests may be filed electronically via the internet in lieu of paper. See, 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's web site at <http://www.ferc.fed.us/efi/doorbell.htm>.

If the Commission decides to set the application for a formal hearing before an Administrative Law Judge, the Commission will issue another notice describing that process. At the end of the Commission's review process, a final Commission order approving or denying a certificate will be issued.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 01-76 Filed 1-2-01; 8:45 am]

BILLING CODE 6717-01-M

ENVIRONMENTAL PROTECTION AGENCY**[FRL-6927-3]****Access to Confidential Business Information by Riojas Enterprises, Inc.****AGENCY:** Environmental Protection Agency.**ACTION:** Notice.

SUMMARY: EPA has authorized its contractor, Riojas Enterprises, Inc., of Kansas City, Kansas, who is the prime contractor, for access to information which has been submitted to EPA under the environmental statutes administered by the Agency. Some of this information may be claimed or determined to be Confidential Business Information (CBI).

DATES: Comments must be received on or before January 18, 2001.

ADDRESSES: Questions about this notice should be addressed to: Barry Thierer, Environmental Protection Agency, Office of Policy and Management, Information Resources Management Branch, (IRMB) 901 N. 5th Street, Kansas City, Kansas 66101. Telephone (913/551-7515; thierer,barry@epa.gov).

FOR FURTHER INFORMATION CONTACT: Barry Thierer, (913) 551-7515.

SUPPLEMENTARY INFORMATION: Under the Contract Number 68-R7-01-01, Riojas provides agency-wide information management support services to the Environmental Protection Agency for the operation of dockets, records management support programs, records center, and file rooms, in Regional and Laboratory offices. In performing these tasks, Riojas employees have access to Agency documents for purposes of document processing, filing, abstracting, analyzing, inventorying, retrieving, tracking, filming, scanning, etc. The documents to which Riojas have access potentially include all documents submitted under the Resource Conservation and Recovery Act, Clean Air Act, Clean Water Act, and Comprehensive Environmental Response, Compensation, and Liability Act. Some of these documents may contain information claimed as CBI.

Pursuant to EPA regulations at 40 CFR part 2, subpart B, EPA has determined that Riojas require access to CBI to perform the work required under the contract. These regulations provide for five days notice before contractors are given CBI.

Riojas is required by contract to protect confidential information. Clearance for access to CBI will continue until November 15, 2003.

Riojas personnel will be required to sign nondisclosure agreements and will

be briefed on appropriate security procedures before they are permitted access to CBI.

List of Subjects

Environmental Protection, Access to Confidential Business Information.

Jody Hudson,

Associate Assistant Regional Administrator for Information Management, Office of Policy and Management.

[FR Doc. 01-116 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P**ENVIRONMENTAL PROTECTION AGENCY****[FRL-6927-9]****Meeting of the Mobile Sources Technical Review Subcommittee****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, Public Act, Public Law 92-463, notice is hereby given that the Mobile Sources Technical Review Subcommittee of the Clean Air Act Advisory Committee will meet in a regular quarterly session. This is an open meeting. The theme will be "Miscellaneous." The meeting may include presentations on EPA's Mobile6 and the New Generation Model, the Diesel Fuel Analysis Program, the Diesel Retrofit Program and a demonstration of EPA's new auto emissions website. The preliminary agenda for this meeting and draft minutes from the previous one are available from the Subcommittee's website at: www.epa.gov/oar/caaac/mobile_sources-caaac.html

DATES: The meeting will be held on Wednesday, January 17, 2001 from 9 am. to 3:30 pm. Registration begins at 8:30 am.

ADDRESSES: The meeting will be held at the Holiday Inn Select, 480 King Street, Old Town Alexandria, VA 22314.

FOR FURTHER INFORMATION CONTACT:

For technical information: Ms. Cheryl L. Hogan, Alternate Designated Federal Officer, Certification and Compliance Division, U.S. EPA, 2000 Traverwood Drive, Ann Arbor, MI 48105, Ph: 734/214-4402, FAX: 734/214-4053, email: hogan.cheryl@epa.gov.

For logistical and administrative information: Ms. Mary F. Green, FACA Management Officer, U.S. EPA, 2000 Traverwood Drive, Ann Arbor, Michigan, Ph: 734/214-4411, Fax: 734/214-4053, email: green.mary@epa.gov.

Background on the work of the Subcommittee is available at: <http://transaq.ce.gatech.edu/epatac/>.

For more current information: www.epa.gov/oar/caaac/mobile_sources-caaac.html.

Individuals or organizations wishing to provide comments to the Subcommittee should submit them to Ms. Hogan at the address above by January 10, 2001. The Mobile Sources Technical Review Subcommittee expects that public statements presented at its meetings will not be repetitive of previously submitted oral or written statements.

SUPPLEMENTARY INFORMATION: During this meeting, the Subcommittee may also hear progress reports from some of its workgroups as well as updates and announcements on activities of general interest to attendees, e.g., status of relevant EPA regulations and an update on the reorganization of the Office of Transportation and Air Quality.

Dated: December 27, 2000.

Donald E. Zinger,

Acting Director, Office of Transportation and Air Quality.

[FR Doc. 01-115 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P**ENVIRONMENTAL PROTECTION AGENCY****[OEI-100005; FRL-6722-6]****Notice of Stakeholder Meeting; Community Right-to-Know Toxic Chemical Release Reporting****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice of stakeholder meeting.

SUMMARY: EPA will hold a stakeholder meeting to solicit input on the types of information that EPA can provide to help users better understand Toxics Release Inventory (TRI) data reported under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). This meeting will be open to the public.

DATES: The meeting will take place in Washington, DC on January 29, 2001, at 9:00 a.m. and adjourn by 5:00 p.m. Comments, identified by the docket control number OEI-100005, must be received by EPA on or before March 30, 2001.

ADDRESSES: The meeting will be held at the U.S. Environmental Protection Agency, Washington Information Center, Conference Room 3 North, 401 M St., SW., Washington, DC. Comments may be submitted by mail,

electronically, or in person. Please follow the detailed instructions for each method as provided in Unit I. of the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT:

Michelle Price, (202) 260-3372, e-mail: price.michelle@epa.gov, or to register to attend the meeting. Individuals planning to attend the meeting must register in order to ensure that there is adequate space, and to gain entry to the limited access EPA meeting rooms. For

information on EPCRA section 313, contact the Emergency Planning and Community Right-to-Know Hotline, Environmental Protection Agency, Mail Code 5101, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Toll free: 1-800-535-0202, in Virginia and Alaska: (703) 412-9877 or Toll free TDD: 1-800-553-7672. Information concerning this notice is also available on EPA's website at <http://www.epa.gov/tri>.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Notice Apply to Me?

You may be interested in this notice if you use data collected under EPCRA section 313 or if you manufacture, process, or otherwise use any of the EPCRA section 313 chemicals. Potentially affected categories and entities may include, but are not limited to:

Category	Examples of Potentially Interested Entities
Industry	SIC major group codes 10 (except 1011, 1081, and 1094), 12 (except 1241), or 20 through 39; industry codes 4911 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); 4931 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. section 6921 <i>et seq.</i>), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis)
Federal Government	Federal facilities

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility would be affected by this action, you should carefully examine the applicability criteria in part 372, subpart B of Title 40 of the Code of Federal Regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. How Can I Get Copies of Information Associated With This Meeting?

1. *Electronically.* You may obtain electronic copies of this document from the EPA internet Home Page at <http://www.epa.gov/>. On the Home Page select "Laws and Regulations" and then look up the entry for this document under the "**Federal Register**—Environmental Documents." You can also go directly to the "**Federal Register**" listings at <http://www.epa.gov/homepage/fedrgstr/>.

2. *In person.* The Agency has established an official record for this

notice under docket control number OEI-100005. The official record consists of documents associated with this public meeting such as meeting transcripts, agenda, background documents, comments submitted by participants or attendees and will include any information claimed as confidential business information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record is available for inspection in the TSCA Nonconfidential Information Center, North East Mall Rm. B-607, Waterside Mall, 401 M St., SW., Washington, DC. The Center is open from noon to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number is 202 260 7099.

C. How and to Whom Do I Submit Comments?

You may submit comments through the mail, in person, or electronically. Be sure to identify the appropriate docket

control number (i.e., "OEI-100005") in your correspondence.

1. *By mail.* Submit written comments to: Document Control Office (7407), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

2. *In person or by courier.* Deliver your comments to: OPPT Document Control Office (DCO) in East Tower Rm. G-099, Waterside Mall, 401 M St., SW., Washington, DC. The DCO is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the DCO is: (202) 260-7093.

3. *Electronically.* Submit your comments electronically by e-mail to: "oppt.ncic@epa.gov." Please note that you should not submit any information electronically that you consider to be CBI. Electronic comments must be submitted as an ASCII file avoiding the

use of special characters and any form of encryption. Comments and data will also be accepted on standard computer disks in WordPerfect 6.1/8.0 or ASCII file format. All comments and data in electronic form must be identified by the docket control number OEI-100005. Electronic comments on this proposal may also be filed online at many Federal Depository Libraries.

D. How Should I Handle CBI Information that I Want to Submit to the Agency?

You may claim information that you submit in response to this proposal as CBI by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential will be included in the public docket by EPA without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult with the technical person identified in the **FOR FURTHER INFORMATION CONTACT** section.

II. Background

The purpose of the meeting is to work with a small group of stakeholders to solicit input on the types of information that EPA can provide to help users better understand the Toxics Release Inventory data. One goal in particular is to identify ways that EPA can help users of the data understand the different factors to consider when using the TRI data. To achieve this goal, EPA is interested in identifying documents and/or tools that the Agency can develop to assist a variety of data users in understanding and using the TRI data. In the past there have been issues raised with regard to the definition of "release," particularly with respect to Class I underground injection wells and Resource Conservation and Recovery Act (RCRA) Subtitle C landfills. Some stakeholders believe that the way EPA provides the data to the public leads to an erroneous perception that a reported EPCRA section 313 "release" necessarily results in an actual exposure of people or the environment to a toxic chemical. EPA is interested in obtaining ideas from stakeholders on documents and/or tools needed to assist data users in understanding the context of all types of toxic chemical releases reported under EPCRA section 313.

List of Subjects in 40 CFR Part 372

Environmental protection, Chemicals, Community right-to-know, Hazardous

substances, Intergovernmental relations, Reporting and recordkeeping requirements, Superfund, Toxic chemicals.

Dated: December 20, 2000.

Elaine G. Stanley, Director

Office of Information Analysis and Access.

[FR Doc. 01-118 File 1-2-01; 8:45 am]

BILLING CODE 6560-50-F

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6928-1]

Notice of Availability: Draft Guidance on Implementing the Water Quality-Based Provisions in the Combined Sewer Overflow Control Policy

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice; availability of draft guidance.

SUMMARY: This document announces that the U.S. Environmental Protection Agency (EPA) is publishing Draft Guidance On Implementing The Water Quality-Based Provisions in the Combined Sewer Overflow (CSO) Control Policy. The guidance is designed to address questions raised since the publication of the CSO Control Policy in 1994 on integrating the long-term control plan (LTCP) development process with the water quality standards review. As outlined in the guidance, EPA will continue to implement the CSO Control Policy through its existing statutory and regulatory authorities. The guidance cannot impose legally binding requirements on EPA, States, Tribes, or the regulated community. It cannot substitute for Clean Water Act (CWA) requirements, EPA's regulations, or the obligations imposed by consent decrees or enforcement orders.

DATES: Public Comments: All public comments on the draft guidance must be received on or before March 5, 2001. All comments should be submitted in writing to the address listed below.

ADDRESSES: Comments should be addressed to Timothy Dwyer, U.S. Environmental Protection Agency, ICC Building (MC 4203M), 1200 Pennsylvania Avenue, NW., Washington, DC 20460. Commenters are also requested to submit an original and 3 copies of their written comments as well as an original and 3 copies of any attachments, enclosures, or other documents referenced in the comments.

EPA will also accept comments electronically. Comments should be addressed to the following e-mail address: dwyer.tim@epa.gov. Electronic

comments must be submitted as an ASCII, WordPerfect 5.1/6.1/8 format file and avoid the use of special characters or any form of encryption.

Interested persons may obtain a copy of the guidance from the Office of Wastewater Management's website (<http://www.epa.gov/owm/cso.htm>) or by contacting the Office of Water Resources Center at 202-260-7786 (e-mail: center.water-resource@epa.gov); mailing address is: Office of Water Resources Center, U.S. Environmental Protection Agency, RC-4100, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Please request, "Draft Guidance on Implementing the Water Quality-Based Provisions in the Combined Sewer Overflow Control Policy" (EPA Number 833-D-00-002; December 2000).

FOR FURTHER INFORMATION CONTACT:

Timothy Dwyer, Office of Wastewater Management, Water Permits Division, MC 4203M, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, Telephone: 202-564-0717.

SUPPLEMENTARY INFORMATION:

EPA issued the Combined Sewer Overflow (CSO) Control Policy in April 1994 (59 FR 18688). To date, EPA has released seven guidance documents and worked with stakeholders to foster implementation of the Policy. The CSO Control Policy calls for the development of a long-term control plan (LTCP), which includes measures that provide for compliance with the Clean Water Act including attainment of water quality standards. The CSO Control Policy provides that the LTCP should be coordinated with the review and revision, as appropriate, of water quality standards and implementation procedures on CSO-impacted receiving waters. This process is intended to ensure that the long-term controls will be sufficient to meet water quality standards (59 FR 18694).

As part of EPA's FY 1999 Appropriation, Congress directed EPA to develop guidance on the conduct of water quality standards and designated use reviews for CSO-receiving waters, and urged EPA to provide technical and financial assistance to States and EPA Regions to conduct these reviews. In response, EPA hosted three stakeholder listening sessions in the Spring of 1999 and an experts workshop on September 24, 1999. The purpose of these meetings was to obtain participants' views on the impediments to implementing the water quality-based provisions in the CSO Control Policy. The guidance addresses many of the stakeholders' concerns, and recommends actions that EPA, State and Interstate Water Pollution Control

Directors, and CSO communities can take to address their concerns.

The objective of this guidance is to lay a strong foundation for integrating CSO long-term control planning with water quality standards reviews. Reaching early agreement among CSO communities, States, EPA, and the public on the data to be collected and the analyses to be conducted to support the long-term control plan development and water quality standards reviews can facilitate the review of water quality standards and the reconciliation of water quality standards with an affordable, well-designed and operated CSO control programs.

The guidance describes the process for integrating LTCP development and implementation with the water quality standards review. This process is the centerpiece of EPA's renewed commitment to assure that both communities with combined sewer systems and States participate in implementing the water quality-based provisions in the CSO Control Policy. The CSO Control Policy anticipates the "review and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect site-specific impacts of CSOs." Integrating CSO long-term control planning with water quality standards reviews requires extensive coordination among CSO communities, States, EPA, and the public. Although this coordination is an intensive iterative process, it provides greater assurance that CSO communities will implement affordable CSO control programs that support the attainment of appropriate water quality standards.

Dated: December 20, 2000.

J. Charles Fox,

Assistant Administrator for Water.

[FR Doc. 01-113 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6928-8]

Draft Guidance for National Hazardous Waste Ombudsman and Regional Superfund Ombudsmen Program

AGENCY: Environmental Protection Agency.

ACTION: Notice of available draft guidance with request for comment.

SUMMARY: The Environmental Protection Agency (EPA) has developed and is requesting comment on the "Draft Guidance for National Hazardous Waste

Ombudsman and Regional Superfund Ombudsmen Program." The Office of Solid Waste and Emergency Response (OSWER) National Hazardous Waste and Superfund Ombudsman (National Ombudsman) and the Regional Superfund Ombudsmen (Regional Ombudsmen) were established to provide help to the public in resolving issues and concerns raised about the solid and hazardous waste programs administered by OSWER.

The purpose of this draft guidance is to explain the role of the Ombudsmen, their scope of activity, and the guidelines under which they coordinate and carry out their responsibilities. EPA believes this draft guidance will improve the effectiveness of this program by giving the Ombudsmen and those who may contact them a clear and consistent set of operating policies and expectations.

DATES: To make sure we consider your comments we must receive them by March 5, 2001. Comments received after that date will be considered to the extent feasible; however, EPA will not delay finalizing the guidance to accommodate late comments.

ADDRESSES: You may request copies of the "Draft Guidance for National Hazardous Waste Ombudsman and Regional Superfund Ombudsmen Program" by any of the following ways:

Mail: write to: Docket Coordinator, Headquarters, U.S. EPA, CERCLA Docket Office, (Mail Code 5201G), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460.

Phone: call: (703) 603-9232, or (800) 424-9346.

Internet: <http://www.epa.gov/swerrims/whatsnew.htm>

If you wish to send us comments on the guidance, you must send them in any one of the following ways:

Mail: Docket Coordinator, Headquarters, U.S. EPA, CERCLA Docket Office, (Mail Code 5201G), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460.

Express Mail or courier (such as Federal Express, other overnight delivery, or courier): Docket Coordinator, Headquarters, U.S. EPA, CERCLA Docket Office, 1235 Jefferson Davis Highway, Crystal Gateway #1, First Floor, Arlington, Virginia, 22202.

E-mail: in ASCII format only to: superfund.docket@epa.gov.

FOR FURTHER INFORMATION CONTACT:

Caroline Previ, phone number (202) 260-2593, Office of Solid Waste and Emergency Response (Mail Code 5101), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460,

or the Superfund Hotline, phone number (800) 424-9346 or (703) 412-9810 in the Washington, D.C. metropolitan area.

SUPPLEMENTARY INFORMATION:

I. Introduction

The program managers and staff in the Regions and at Headquarters are committed to implementing the federal solid waste and hazardous waste statutes managed by EPA, being responsive to the public, and resolving issues and concerns brought to their attention. In some cases, the individual or group raising a given concern does not believe the official problem solving channels dealt fairly or fully with their situation. In such cases, the individual or group may request assistance from the Office of Solid Waste and Emergency Response (OSWER) Ombudsman, an Agency official designated to receive inquiries and complaints about the administration of OSWER programs. The National and Regional Ombudsmen receive many calls for assistance each year—ranging from routine questions about hazardous waste laws to specific complaints about allegedly improper activities conducted at a site or facility.

Today's **Federal Register** notice introduces a policy entitled "Draft Guidance for National Hazardous Waste Ombudsman and Regional Superfund Ombudsmen Program" which explains the role and conduct of the OSWER National Ombudsman and the Regional Superfund Ombudsmen, scope of their activity, and the guidelines under which they coordinate and carry out their responsibilities. The main objective in issuing this guidance is to improve the effectiveness of this program by giving the Ombudsmen and those who may contact them a clear and consistent set of operating policies and expectations. This draft guidance would cover only the Ombudsmen who work on OSWER related issues, and staff who supply primary support or assistance to the Ombudsmen.

This guidance, when finalized, is not intended to be, and should not be construed as a rule. Use of the guidance would not be legally binding on EPA managers or staff or on other parties. EPA is seeking public comment at this time to ensure hearing the widest range of views and obtaining all information relevant to the development of the guidance.

II. Background

The hazardous and solid waste management laws passed by Congress created some of the most complex programs administered by EPA and the

States. Recognizing this, Congress established a National Ombudsman function in 1984 as part of amendments to the Resource Conservation and Recovery Act (RCRA) so that the public would have someone to come to with questions and concerns about the RCRA program. Soon after, we issued the "Hazardous Waste Ombudsman Handbook" to help the newly created National Ombudsman administer, and the public understand what to expect from, the Ombudsman program. During the initial years of the National Ombudsman program, most of the assistance sought by the public was for help understanding the complex RCRA program. The Ombudsman spent most of his time responding to general questions and directing requests to the appropriate sources. The handbook reflected this role.

When the statutory authority for the National Ombudsman program expired in 1989, OSWER retained the function as a matter of policy. In 1991, OSWER broadened the National Ombudsman's scope of activity to include other programs administered by OSWER, particularly the Superfund program. The National Ombudsman is located in the EPA Headquarters office in Washington, DC.

In 1995, EPA created a Regional Superfund Ombudsman position in each EPA Regional office as part of the Superfund Administrative Reforms. The Regional Ombudsmen program, at a minimum, operates in support of the Superfund program, but—depending on the Region—may also provide support to other programs, including RCRA, Underground Storage Tanks (UST), and chemical emergency prevention and preparedness.

Over the years, the public gained a better understanding of EPA's hazardous waste programs. Requests for answers to basic questions more frequently became requests for resolution of complaints. The Ombudsman function evolved to reflect these changes. The existing guidance no longer reflects the Ombudsman function as it has evolved.

In the Fall of 1999, the EPA established an internal workgroup to update the "Hazardous Waste Ombudsman Handbook." In preparing the updated guidance, the workgroup met with representatives of the U.S. Ombudsman Association, and evaluated and considered guidance documents from this organization, as well as other organizations with Ombudsman programs and the American Bar Association's draft Standards for the Establishment and Operation of Ombudsman Offices. To the extent

possible, EPA has drafted guidelines which reflect key aspects of various external models in a manner that supports the Ombudsman's independent operation within the context of a civil service position within the Federal government structure. EPA developed these procedures to meet the specific needs of the OSWER Ombudsman program and they may not be completely consistent with Ombudsmen principles established by other organizations.

The draft guidance explains to the public the role of the National Hazardous Waste and Superfund Ombudsman and Regional Superfund Ombudsmen today, their scope of activity, and the guidelines under which they coordinate and carry out their responsibilities. We believe the draft guidance will provide for effective and fair implementation of OSWER's Ombudsman program.

III. Summary of Draft Guidance

The draft "Guidance for the National Hazardous Waste and Superfund Ombudsman and Regional Superfund Ombudsmen Program" puts forth our philosophy concerning the basic operating principles and procedures for the OSWER Ombudsman program. Ombudsmen functioning under this guidance are authorized to provide information and look into complaints and grievances related to OSWER's administration of the programs implemented under the following authorities:

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or Superfund
- Resource Conservation and Recovery Act (RCRA), including Underground Storage Tanks (UST)
- Emergency Planning and Community Right-To-Know Act (EPCRA) or Superfund Amendments and Reauthorization Act, Title III
- Oil Pollution Act
- Clean Air Act, Section 112r

The Ombudsman may be called to serve in a number of capacities: (1) providing information and facilitating informal contact with EPA staff, (2) conducting informal inquiries and developing recommendations to address difficult problems, (3) helping to mediate disputes, and (4) making recommendations to Agency senior management regarding procedural and policy changes aimed at improving the program. The goal of the Ombudsman program is to respond to requests in an appropriate, transparent and objective manner as promptly, informally and discretely as possible. The guidance briefly discusses each of these

functions, but we anticipate that a significant amount of the Ombudsman's time will be dedicated to looking into issues raised by the public concerning decisions that EPA has made. Because of this, most of the draft guidance is devoted to outlining the Ombudsman's responsibilities in carrying out this activity. Overall, the Ombudsman's role is to listen to all sides in an impartial, objective manner, to provide assistance in trying to understand and resolve the problem, and, if necessary, to recommend possible solutions to senior Agency managers. It is important to note that the Ombudsman does not have authority to change decisions made by program managers or staff.

Generally, the National Ombudsman handles cases of national significance. The Regional Ombudsmen handle the more routine requests for assistance and conducts more informal inquiries to investigate complaints. The guidance explains how the Ombudsman will evaluate requests for assistance, and how inquiries will be conducted.

Whatever capacity the Ombudsman is serving in, he is expected to act with independence, impartiality and confidentiality—the basic operating principles of all Ombudsmen. The guidance provides a brief description of how the Ombudsman will demonstrate these responsibilities effectively and discusses limitations with respect to confidentiality imposed by existing laws and regulations that the OSWER Ombudsman must abide by as federal civil servant.

Our goal is to receive feedback on the draft guidance from the widest range of interested parties possible. We welcome comments on any or all aspects of the guidance. Your comments will help us improve this document. We invite you to provide your comments on our approach and your ideas on alternative approaches we have not considered. Explain your views as clearly as possible and provide a summary of the reasoning you used to arrive at your conclusions. Tell us which parts of the guidance you support, as well as the parts with which you disagree. Your comments must be submitted by March 5, 2001. EPA will review the public comments received on the guidance and where appropriate, incorporate changes responsive to those comments.

We specifically request your comments on the following three topics related to the independence of the Ombudsman. These issues emerged as key issues during the development of this guidance.

1. Does the Organizational Structure of the Ombudsman Program Impact the Independence of the Ombudsman?

One of the main principles an Ombudsman operates under is the ability to work independently in determining which complaints to investigate, how an inquiry should proceed and what are the findings of an inquiry. EPA recognizes the importance of an Ombudsman being and appearing to be independent from the organization he/she is investigating. EPA believes both the National Ombudsman and the Regional Ombudsmen are able to look independently into problems and facilitate the communication that can lead to a solution. We do not select which cases the Ombudsman will take, nor direct how the Ombudsman will investigate a complaint. We do not interfere with or attempt to influence the Ombudsman as he formulates his findings and recommendations.

From the time Congress established the National Ombudsman, this function has been a federal government employee reporting to a senior Agency official. Because the Ombudsman is a federal employee, he/she cannot be completely independent in the normal course of relations between a supervisor and his/her employee. Currently, the National Ombudsman reports directly to the Assistant Administrator for OSWER. We believe this is the appropriate reporting structure for the National Ombudsman. The Assistant Administrator for OSWER is the senior presidential appointee responsible for the programs the Ombudsman is looking into and he/she is in the best position to use the advice of the National Ombudsman. For the most part, each Regional Ombudsman reports to the appropriate Regional Superfund division director, directly or through an intermediate supervisor. No matter what capacity an Ombudsman is serving in at any given time, we have worked to ensure the Ombudsman's ability to operate with maximum independence.

The organizational location and operation of the National Ombudsman and the Regional Ombudsmen is a matter of EPA discretion. We agree that it is very important that the Ombudsman be and appear to be independent from the organization he is investigating.

Does this structure ensure the appropriate level of interaction between the OSWER Ombudsman and senior EPA officials while maintaining enough independence for the Ombudsman to operate effectively?

2. Should the Ombudsman Have Sole Discretion To Decide How Cases Are To Be Handled?

The guidance states that the National and Regional Ombudsmen have the discretion either to accept a request for assistance or decline to act. While the National Ombudsman and the Regional Ombudsmen work fairly autonomously, coordination in this area is crucial. Requests for assistance may come directly to either the National or a Regional Ombudsman. To avoid duplication of effort, the guidance lays out general procedures for evaluating incoming requests.

The guidance requires that before conducting an inquiry that is primarily related to one Region, the National Ombudsman will consult with the relevant Regional Ombudsman. We believe this consultation will help the National Ombudsman make a fully informed decision about whether it is more appropriate for him/her to handle the matter, to refer it to the Regional Ombudsman, or to decline to investigate. Similarly, a Regional Ombudsman is expected to notify the National Ombudsman if he/she has been requested to conduct an inquiry that may be nationally significant. The Regional Ombudsman should discuss with the National Ombudsman how he/she plans to proceed with the inquiry, including the level of involvement that the National Ombudsman wishes to have in the inquiry.

We expect that a Regional Ombudsman and the National Ombudsman almost always will agree on who should handle an inquiry. In those rare situations when there is not agreement the Assistant Administrator or Deputy Assistant Administrator for OSWER will resolve the dispute. The guidance requires the Regional Ombudsman (in consultation with the appropriate Regional Administrator or Deputy Regional Administrator) and the National Ombudsman will each forward a memorandum to the Assistant Administrator for OSWER, or jointly hold a conference call explaining his/her perspective on the disagreement. The Assistant Administrator or Deputy Assistant Administrator for OSWER will then make the decision about who should handle the inquiry.

Is this the appropriate way to resolve such disputes?

3. Should an Ombudsman's Scope of Inquiry Be Restricted To Protect EPA's Litigation Position?

We considered three alternative approaches to this question. The approach we selected and which is

reflected in the draft guidance generally precludes the Ombudsmen from investigating an issue or dispute which is in litigation, *i.e.*, pending before a court. The presumption is that Ombudsmen should not take action on an issue or dispute which is in litigation since that issue is in the hands of an independent tribunal for decision, as provided for by the relevant statute. In addition, the public has access to that tribunal to raise serious concerns. For example, in the case of a consent decree presented to a court, public comment will be solicited on the decree, and the court will consider those comments and then determine if it is in the public interest to enter the decree. In the case of a challenge to agency action, affected members of the public can intervene and present argument to the court, and the court will decide whether we demonstrated an adequate basis for its action and whether we acted in a non-arbitrary manner and in accordance with law. This approach also avoids creating the false impression that the Ombudsman's office is an alternative forum for arguing controversial issues, which would result in confusion, inefficiency, and potentially conflicting statements about the Agency's position. The OSWER Ombudsman program is not intended or authorized to circumvent existing channels of management authority or established formal administrative avenues of appeal.

However, we believe that there may be situations where it is appropriate for the Ombudsman to investigate actions EPA has taken, even where those actions are before a court for review. For instance, the Ombudsman may have information to suggest that our action at issue in the legal proceedings is infirm or erroneous. Or the Ombudsman may bring to Agency management information of significant public concern about an Agency action at issue in the courts. In either case, if the Ombudsman believes an inquiry is necessary, he/she should communicate that information to the appropriate Agency official before proceeding with his/her inquiry. Such an investigation would proceed only after concurrence by the Assistant Administrator or Deputy Assistant Administrator for OSWER or the appropriate Regional Administrator or Deputy Regional Administrator, in consultation with EPA's lead litigation office, taking into account its potential impact on pending litigation.

It should be noted that this presumption against investigations applies to an "issue or dispute" that is before a court for consideration. Thus,

the fact that a site or facility is in litigation does not necessarily mean that the Ombudsman should refrain from conducting an investigation of all issues arising at that site or facility. For instance, if the issue before a court is the authority of the Agency to get access to a piece of property, that would not create a presumption against an investigation of alleged deficiencies regarding remedy selection.

For your information, we are providing details of the two alternative approaches to this matter we considered but did not select. The first alternative approach removed any restrictions on the Ombudsman's ability to conduct an inquiry concerning an issue or dispute which is in litigation. The Ombudsman would be free to conduct an inquiry regardless of whether an issue or dispute was in litigation.

The second alternative approach would restrain the Ombudsman from conducting new fact gathering concerning decisions made based on the administrative record. The Ombudsman would remain able to audit the existing information and data that were part of the Agency's factual record. Under this model, if the Ombudsman concluded that additional fact finding and data gathering were necessary, that would become part of his recommendation. If the Agency agreed with this recommendation, it would conduct additional information gathering by utilizing the appropriate program staff and established procedures. The Ombudsman would be precluded from undertaking separate fact finding activities such as public meetings and formal on-the-record interviews. This approach would address concerns that an Ombudsman's activities may create a

second record outside of the official administrative record, which could confuse and potentially mislead the public and could damage the Agency's position during litigation.

Is the chosen approach the most appropriate?

Dated: December 27, 2000.

Michael Shapiro,

Acting Assistant Administrator, Office of Solid Waste and Emergency Response.

[FR Doc. 01-112 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6928-3]

Clean Water Act Section 303(d): Availability of Total Maximum Daily Loads (TMDLs)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

SUMMARY: This notice announces the availability for comment of the administrative record file for 88 TMDLs prepared by EPA Region 6 for waters listed in Louisiana's Mermentau and Vermilion/Teche river basins, under section 303(d) of the Clean Water Act (CWA). EPA prepared these TMDLs in response to a Court Order dated October 1, 1999, in the lawsuit *Sierra Club, et al. v. Clifford et al.*, No. 96-0527, (E.D. La.). Under this court order, EPA is required to prepare TMDLs when needed for waters on the Louisiana 1998 section 303(d) list by December 31, 2007.

DATES: Comments on the 88 TMDLs must be submitted in writing to EPA on or before February 2, 2001.

ADDRESSES: Comments on the 88 TMDLs should be sent to Ellen Caldwell, Environmental Protection Specialist, Water Quality Protection Division, U.S. Environmental Protection Agency Region 6, 1445 Ross Ave., Dallas, TX 75202-2733. For further information, contact Ellen Caldwell at (214) 665-7513. The administrative record file for these TMDLs is available for public inspection at this address as well. Copies of the TMDLs and their respective calculations may be viewed at www.epa.gov/region6/water/tmdl.htm, or obtained by calling or writing Ms. Caldwell at the above address. Please contact Ms. Caldwell to schedule an inspection.

FOR FURTHER INFORMATION CONTACT: Ellen Caldwell at (214) 665-7513.

SUPPLEMENTARY INFORMATION: In 1996, two Louisiana environmental groups, the Sierra Club and Louisiana Environmental Action Network (plaintiffs), filed a lawsuit in Federal Court against the United States Environmental Protection Agency (EPA), styled *Sierra Club, et al. v. Clifford et al.*, No. 96-0527, (E.D. La.). Among other claims, plaintiffs alleged that EPA failed to establish Louisiana TMDLs in a timely manner. Discussion of the court's order may be found at 65 FR 54032 (September 6, 2000).

EPA Seeks Comments on 88 TMDLs

By this notice EPA is seeking comment on the following 88 TMDLs for waters located within the Mermentau and Vermilion/Teche basins:

Subsegment	Waterbody name	Pollutant
060205	Bayou Teche—Headwaters At Bayou Courtableau to I-10	Salinity/TDS.
060211	West Atchafalaya Borrow Pit Canal	Salinity/TDS.
060301	Bayou Teche—I-10 to Keystone Locks and Dam	Salinity/TDS.
050201	Bayou Plaquemine Brule—Head-Waters to Bayou Descannes	Chlorides.
050401	Mermentau River—Origin to Lake Arthur	Ammonia.
060102	Cocodrie Lake	Ammonia.
		Noxious Aquatic.
		Plants & Ammonia.
		Chlorides.
		Sulfate.
060204	Bayou Courtableau—Origin to West Atchafalaya Borrow Pit Canal	Ammonia.
		Salinity/TDS.
060203	Chicot Lake	Noxious Aquatic.
		Plants & Nutrients.
050101	Bayou Des Cannes—Headwaters to Mermentau River	Nutrients.
050301	Bayou Nezpique—Headwaters to Mermentau River	Nutrients.
060202	Bayou Cocodrie	Nutrients.
060208	Bayou Boeuf—Headwaters To Bayou Courtableau	Nutrients.
060211	West Atchafalaya Borrow Pit Canal	Sulfates.
060301	Bayou Teche—I-10 to Keystone Locks and Dam	Sulfates.
050101	Bayou Des Cannes—Headwaters to Mermentau River	Total Suspended Solids (TSS).
050102	Bayou Joe Marcel	TSS.
050103	Bayou Mallet	TSS.

Subsegment	Waterbody name	Pollutant
050201	Bayou Plaquemine Brule—Headwaters To Bayou Des Cannes	Siltation. TSS.
050301	Bayou Nezpique—Headwaters to Mermentau River	Siltation. TSS.
050302	Mermentau River Basin	Siltation. TSS.
050401	Mermentau River—Origin to Lake Arthur	TSS.
050402	Lake Arthur and Lower Mermentau	TSS.
050501	Bayou Que de Tortue—Headwaters To Mermentau River	TSS. Siltation.
050602	Intracoastal Waterway	TSS.
050701	Grand Lake	TSS.
050702	Intracoastal Waterway	TSS.
050703	White Lake	Siltation. TSS.
050901	Bays and Gulf Waters to State 3-mile Limit	Siltation. TSS.
060101	Spring Creek—Headwaters to Cocodrie Lake (Scenic)	TSS.
060102	Cocodrie Lake	Siltation.
060201	Bayou Cocodrie—From U.S. Hwy 167 To the Bayou Boeuf Cocodrie Canal	TSS.
060202	Bayou Cocodrie	TSS. Siltation.
060203	Chicot Lake	TSS.
060204	Bayou Courtableau—Origin to West Atchafalaya Borrow Pit Canal	TSS.
060205	Bayou Teche—Headwaters at Bayou Courtableau to I-10	TSS.
060207	Bayou des Glaisses Diversion Canal	TSS.
060208	Bayou Boeuf—Headwaters to Bayou Courtableau	TSS.
060210	Bayou Carron	TSS.
060211	West Atchafalaya Borrow Pit Canal	TSS.
060212	Chatlin Lake Canal and Bayou Dulac	TSS. Siltation.
060301	Bayou Teche—I-10 to Keystone Locks and Dam	Turbidity. TSS.
060401	Bayou Teche—Keystone Locks and Dam to Charenton Canal	TSS.
060501	Bayou Teche—Charenton Canal to Wax Lake Outlet	TSS.
060601	Charenton Canal	TSS.
060701	Tete Bayou	TSS.
060702	Lake Fausse Point and Dauterive Lake	TSS. Siltation.
060703	Bayou du Portage	TSS.
060906	Intracoastal Waterway	TSS.
060907	Franklin Canal	TSS. Turbidity.
060801	Vermilion River—Headwaters at Bayou Fusilier-Bourbeaux Junction to New Flanders (Ambassador Caffery Bridge At Hwy 3073).	TSS.
060802	Vermilion River—From New Flanders (Ambassador Caffery Bridge at Hwy 3073 to Intracoastal Waterway).	TSS.
060803	Vermilion River Cutoff	TSS.
060804	Intracoastal Waterway	TSS.
060901	Bayou Petite Anse	TSS.
060902	Bayou Carlin (Delcambre Canal)— Lake Peigneur to Bayou Petite Anse (Estuarine).	TSS.
060903	Bayou Tigre	TSS.
060904	Vermilion River B890 Basin New Iberia Drainage Canal	TSS.
060905	New Iberia Southern Drainage Canal	TSS. Turbidity.
060909	Lake Peigneur	Siltation. TSS.
060910	Boston Canal and Associated Canals (Estuarine)	Siltation. TSS. Turbidity.
060911	Vermilion-Teche River Basin	TSS.
061101	Bayou Petite Anse	Siltation. TSS. Turbidity.
061102	Intracoastal Waterway	TSS.
061103	Freshwater Bayou Canal	TSS. Turbidity.

EPA requests that the public provide to EPA any water quality related data

and information that may be relevant to the calculations for these TMDLs, or any

other comments relevant to these TMDLs. EPA will review all data and

information submitted during the public comment period and revise the TMDLs where appropriate. EPA will then forward the TMDLs to the Court and the Louisiana Department of Environmental Quality (LDEQ). LDEQ will incorporate the TMDLs into its current water quality management plan.

Dated: December 21, 2000.

Sam Becker,

Acting Director, Water Quality Protection Division, Region 6.

[FR Doc. 01-114 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6927-4]

Notice of Tentative Approval and Solicitation of Requests for a Public Hearing for Public Water System Supervision Program Revision for the State of Delaware

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of tentative approval and solicitation of requests for a public hearing.

SUMMARY: Notice is hereby given in accordance with the provision of section 1413 of the Safe Drinking Water Act as amended, and the rules governing National Primary Drinking Water Regulations that the State of Delaware has revised its approved Public Water System Supervision Primacy Program. Specifically, Delaware has revised its Administrative Penalty Authority and its definition of a public water system. EPA has determined that these program revisions satisfy the requirements of the Federal regulations. Therefore, EPA has decided to tentatively approve these program revisions. All interested parties are invited to submit written comments on this determination and may request a public hearing.

DATES: Comments or a request for a public hearing must be submitted by February 2, 2001. This determination shall become effective on February 2, 2001 if no timely and appropriate request for a hearing is received and the Regional Administrator does not elect to hold a hearing on his own motion, and if no comments are received which cause EPA to modify its tentative approval.

ADDRESSES: Comments or a request for a public hearing must be submitted to the U.S. Environmental Protection Agency Region III, Mail Code 3WP22, 1650 Arch Street, Philadelphia, PA 19103-2029. All documents relating to

this determination are available for inspection between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, at the following offices:

- Drinking Water Branch, Water Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103-2029; and
- Delaware Department of Health and Social Services, Division of Public Health, Office of Drinking Water, Blue Hen Corporate Center-Suite 203, Dover, DE 19001.

FOR FURTHER INFORMATION CONTACT:

Frederick N. Mac Millan, Drinking Water Branch (3WP22) at the Philadelphia address given above; telephone (215) 814-3201 or fax (215) 814-2318.

SUPPLEMENTARY INFORMATION: All interested parties are invited to submit written comments on this determination and may request a public hearing. All comments will be considered, and, if necessary, EPA will issue a response. Frivolous or insubstantial requests for a hearing may be denied by the Regional Administrator. However, if a substantial request for a public hearing is made by February 2, 2001, a public hearing will be held. A request for public hearing shall include the following: (1) the name, address, and telephone number of the individual, organization, or other entity requesting a hearing; (2) a brief statement of the requesting person's interest in the Regional Administrator's determination and of information that the requesting person intends to submit at such a hearing; and (3) the signature of the individual making the request; or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

Dated: December 21, 2000.

Bradley M. Campbell,

Regional Administrator, EPA, Region III.

[FR Doc. 01-36 Filed 1-2-01; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL EMERGENCY MANAGEMENT AGENCY

Open Meeting, Advisory Committee for the National Urban Search and Rescue Response System

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice of open meeting.

SUMMARY: In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Publ. L. 92-463, 5 U.S.C.

App.), announcement is made of the following committee meeting:

Name: Advisory Committee for the National Urban Search and Rescue Response System.

Date of Meeting: January 30-31, 2001

Place: Marriott Wardman Park Hotel, 2660 Woodley Road, NW, Washington, DC 20008.

Time: January 30: 9:00 a.m.—5:00 p.m.
January 31: 9:00 a.m.—5:00 p.m.

Proposed Agenda: The committee will be provided with a program update that will address the status of ongoing program activities, including recent training and exercises. The committee will review and revise the current Advisory Organization Decision Process document. The committee will consider current and future program requirements and will make recommendations for budget allocations and requests for Fiscal Years 2001 through 2003. Discussion will also be held concerning urban search and rescue task force operational status and transportation issues. The committee will review the current status of draft urban search and rescue regulations and system documentation revisions. Finally, the committee will identify priorities for its subordinate working groups for Fiscal Year 2001.

The meeting will be open to the public, with approximately 20 seats available on a first-come, first-served basis. All members of the public interested in attending should contact Mark R. Russo, at 202-646-2701.

Minutes of the meeting will be prepared and will be available for public viewing at the Federal Emergency Management Agency, Operations and Planning Division, Response and Recovery Directorate, 500 C Street, SW, Washington, DC 20472. Copies of the minutes will be available upon request 30 days after the meeting.

Robert J. Adamcik,

Deputy Associate Director, Response & Recovery Directorate.

[FR Doc. 01-70 Filed 1-2-01; 8:45 am]

BILLING CODE 6718-02-P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisition of Shares of Bank or Bank Holding Companies

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817 (j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the office of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank

indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than January 16, 2001.

A. Federal Reserve Bank of St. Louis (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166–2034:

1. *First Paris Limited Partnership*, Little Rock, Arkansas; to acquire voting shares of First Paris Holding Company, Little Rock, Arkansas, and thereby indirectly acquire voting shares of The First National Bank at Paris, Paris, Arkansas.

2. *Lake Hamilton Enterprises Limited Partnership*, Little Rock Arkansas; to acquire voting shares of Lake Hamilton Enterprises, Inc., Little Rock, Arkansas, and thereby indirectly acquire voting shares of The Cleburne County Bank, Heber Springs, Arkansas, and The Bank of Harrisburg, Harrisburg, Arkansas.

B. Federal Reserve Bank of Minneapolis (JoAnne F. Lewellen, Assistant Vice President) 90 Hennepin Avenue, Minneapolis, Minnesota 55480–0291:

1. *Jeffrey Campbell*, Dunseith, North Dakota; to acquire voting shares of Security Bancshares, Inc., Dunseith, North Dakota, and thereby indirectly acquire voting shares of Security State Bank, Dunseith, North Dakota.

Board of Governors of the Federal Reserve System, December 27, 2000.

Jennifer J. Johnson

Secretary of the Board.

[FR Doc. 01–53 Filed 1–3–01; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 et seq.) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in

writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States. Additional information on all bank holding companies may be obtained from the National Information Center website at www.ffiec.gov/nic/.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than January 26, 2001.

A. Federal Reserve Bank of Philadelphia (Michael E. Collins, Senior Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105–1521:

1. *Juniper Financial Corp.*, Wilmington, Delaware; to become a bank holding company by acquiring 100 percent of the voting shares of First Bank, CBC, Maryville, Missouri.

B. Federal Reserve Bank of Kansas City (D. Michael Manies, Assistant Vice President) 925 Grand Avenue, Kansas City, Missouri 64198–0001:

1. *The Viking Corporation*, Omaha, Nebraska; to acquire up to 45.5 percent of the voting shares of K.B.J. Enterprises, Inc., Omaha, Nebraska, and thereby indirectly acquire additional voting shares of Sibley State Bank, Denison, Iowa.

Board of Governors of the Federal Reserve System, December 27, 2000.

Jennifer J. Johnson

Secretary of the Board.

[FR Doc. 01–54 Filed 1–3–01; 8:45 am]

BILLING CODE 6210–01–S

FEDERAL RESERVE SYSTEM

Government in the Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING: Board of Governors of the Federal Reserve System.

TIME AND DATE: 11 a.m., Monday, January 8, 2001.

PLACE: Marriner S. Eccles Federal Reserve Board Building, 20th and C Streets, NW., Washington, DC 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions)

involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Lynn S. Fox, Assistant to the Board; 202–452–3204.

SUPPLEMENTARY INFORMATION: You may call 202–452–3206 beginning at approximately 5 p.m. two business days before the meeting for a recorded announcement of bank and bank holding company applications scheduled for the meeting; or you may contact the Board's Web site at <http://www.federalreserve.gov> for an electronic announcement that not only lists applications, but also indicates procedural and other information about the meeting.

Dated: December 29, 2000.

Jennifer J. Johnson,

Secretary of the Board.

[FR Doc. 00–33463 Filed 12–29–00; 3:40 pm]

BILLING CODE 6210–01–P

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

Sunshine Act Notice

TIME AND DATE: 10 a.m. (EST), January 8, 2001.

PLACE: 4th Floor, Conference Room 4506, 1250 H Street, NW., Washington, DC.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Approval of the minutes of the December 11, 2000, Board member meeting.
2. Thrift Savings Plan activity report by the Executive Director.
3. Review of KPMG LLP audit reports:
 - (a) Access Controls and Security over the New Thrift Savings Plan Application at the United States Department of Agriculture, National Finance Center
 - (b) Pre-Implementation Review of the New Thrift Savings Plan System's Selected Business Processes and Data Conversion Controls at the United States Department of Agriculture, National Finance Center

CONTACT PERSON FOR MORE INFORMATION: Thomas J. Trabucco, Director, Office of External Affairs, (202) 942–1640.

Date: December 28, 2000.

Elizabeth S. Woodruff,

Secretary to the Board, Federal Retirement Thrift Investment Board.

[FR Doc. 00–33461 Filed 12–28–00; 4:36 pm]

BILLING CODE 6760–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Office of the Secretary****Agency Information Collection Activities; Proposed Collections; Comment Request**

The Department of Health and Human Services, Office of the Secretary will periodically publish summaries of proposed information collections projects and solicit public comments in compliance with the requirements of Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995. To request more information on the project or to obtain a copy of the information collection plans and instruments, call the OS Reports Clearance Officer on (202) 690-6207.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

1. Self-Evaluation and Recordkeeping Required by the Regulation Implementing Section 504 of the Rehabilitation Act of 1973 (45 CFR 84.6(c))—Extension—0990-0124—Recipients of DHHS funds must conduct a single-time evaluation of their policies and practices for compliance with Section 504 of the Rehabilitation Act of 1973. Recipients with fifteen or more employees must maintain records of their self-evaluation for three years. *Respondents:* State or local governments, businesses or other for-profit, non-profit institutions; *Annual Number of Respondents:* 2,120; *Frequency of Response:* once; *Burden per Response:* 16 hours; *Total Annual Burden:* 33,920 hours.

Send comments to Cynthia Agnes Bauer, OS Reports Clearance Officer, Room 503H, Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201. Written comments should be received within 60 days of this notice.

Dated: December 15, 2000.

Dennis P. Williams,

Deputy Assistant Secretary, Budget.

[FR Doc. 01-133 Filed 1-2-01; 8:45 am]

BILLING CODE 4153-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Administration for Children and Families****Head Start Bureau; Advisory Committee on Head Start Research and Evaluation; Meeting**

AGENCY: Administration on Children, Youth and Families, ACF, DHHS.

ACTION: Notice of meeting; Advisory Committee on Head Start Research and Evaluation.

SUMMARY: The 1998 Head Start Reauthorization (42 U.S.C. 9844(g); section 649(g)(1) of the Head Start Act, as amended) called on the Secretary of Health and Human Services to form an independent panel of experts (*i.e.*, an Advisory Committee) to offer advice concerning research designs that would provide a national analysis of the impact of Head Start Programs. The January 12, 2001 meeting provides an opportunity for the Advisory Committee to receive an update on the design and implementation plans for the study.

DATES: January 12, 2001, 8:30 a.m.—4 p.m.

PLACE: Hilton Washington Embassy Row, 2015 Massachusetts Avenue, NW., Washington, DC 20036. Telephone 202-265-1600. Fax: 202-328-7526.

SUPPLEMENTARY INFORMATION: This meeting is open to the public and is barrier free. Meeting records will also be open to the public and will be kept at the Switzer Building located at 330 C Street, SW., Washington, DC 20447. The Head Start Bureau also intends to make material related to this meeting available on the Head Start website (<http://www2.acf.dhhs.gov/programs/hsb/hsreac>). An interpreter for the deaf and hearing impaired will be available upon advance request by calling Ellsworth Associates at 703/821-3090 (ext. 282).

FOR FURTHER INFORMATION CONTACT: Michael L. Lopez, Ph.D. at 202-205-8212 for substantive information. ACF Office of Public Affairs at 202/401-9215 for press inquiries. Ellsworth Associates at 703/821-3090 (ext. 282) for logistical information.

Dated: December 27, 2000.

James A. Harrell,

Acting Commissioner, Administration on Children, Youth and Families.

[FR Doc. 01-80 Filed 1-2-01; 8:45 am]

BILLING CODE 4184-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Food and Drug Administration**

[Docket No. 00N-1666]

Agency Information Collection Activities; Proposed Collection; Comment Request; Abbreviated New Drug Application Regulations; Patent and Exclusivity Provisions

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act of 1995 (the PRA), Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of an existing collection of information, and to allow 60 days for public comment in response to the notice. This notice solicits comments on the patent and exclusivity notification requirements under the new drug application (NDA) and abbreviated new drug application (ANDA) regulations.

DATES: Submit written or electronic comments on the collection of information by March 5, 2001.

ADDRESSES: Submit electronic comments on the collection of information to <http://www.accessdata.fda.gov/scripts/oc/dockets/edockethome.cfm>. Submit written comments on the collection of information to the Dockets Management Branch (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. All comments should be identified with the docket number found in brackets in the heading of this document.

FOR FURTHER INFORMATION CONTACT: Karen L. Nelson, Office of Information Resources Management (HFA-250), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-827-1482.

SUPPLEMENTARY INFORMATION: Under the PRA (44 U.S.C. 3501-3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. "Collection of information" is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party.

Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires Federal agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, FDA is publishing notice of the proposed collection of information set forth in this document.

With respect to the following collection of information, FDA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Abbreviated New Drug Application Regulations; Patent and Exclusivity Provisions (OMB Control Number 0910-0305)—Extension

Section 505 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 355) requires patent owners to submit to FDA information about patents that cover approved drugs. Generic copies of these drugs may be approved when the patents expire or if a generic company certifies that the patent is invalid or will not be infringed. In such cases, the generic company must notify the patent owner about the certification, and approval of the drug may not be made effective until after the court decides the

patent infringement suit or a period of 36 months, whichever occurs first. In addition, section 505 of the act provides several periods of marketing exclusivity ranging from 3 to 10 years (depending primarily on the nature of the innovation). If a drug product receives marketing exclusivity, FDA will not approve (or, in limited cases not receive) an ANDA for the drug product.

Under the authority found in sections 505 and 701 of the act (21 U.S.C. 371), FDA issued regulations governing patent and exclusivity provisions in 21 CFR part 314. The regulations provide instructions for NDA applicants (including section 505(b)(2) of the act applicants) and ANDA applicants on how to file patent information and request marketing exclusivity; require patent certification information for section 505(b)(2) applications and ANDA's; require information for requests for marketing exclusivity for NDA's (including section 505(b)(2) applications and certain NDA supplements); and require patent information for NDA's.

The specific reporting requirements that are the subject of this information collection are as follows:

21 CFR 314.50(i)—Requires the submission of patent certification information.

21 CFR 314.50(j)—Requires the submission of marketing exclusivity information.

21 CFR 314.52—Requires notice of certification of invalidity or noninfringement of a patent.

21 CFR 314.53—Requires the submission of patent information.

21 CFR 314.54(a)(1)(vii)—Requires the submission of marketing exclusivity information.

21 CFR 314.70(e)—Requires the submission of patent information.

21 CFR 314.70(f)—Requires the submission of marketing exclusivity information.

21 CFR 314.94(a)(12)—Requires the submission of patent certification information.

21 CFR 314.95—Requires notice of certification of invalidity or noninfringement of a patent.

21 CFR 314.107(c)(4), (e)(2)(iv), and (f)—Requires notice of the date of commercial marketing; a copy of the entry of the order or judgement; notice of the filing of legal action after notice of certification.

Applicants must provide information on patents to FDA to enable the agency to determine whether a product is covered by a patent or whether approval of a proposed drug product would result in patent infringement. The agency lists the patent information as a reference of potential applicants. If an applicant believes a patent is invalid or would not be infringed, Federal law also requires it to notify the patent holder. FDA approval, in such cases, is affected should there be any patent litigation. Failure to provide this information would result in an incomplete application and constitute grounds for refusing to approve the application.

Applicants submitting NDA's are required under the act to provide information on certain patents that cover their drug products. The agency lists this patent information in its publication entitled *List of Approved Drug Products With Therapeutic Equivalence Evaluations*.

To promote product innovation, the act also gives NDA applicants several periods of "market exclusivity" ranging from 3 to 10 years (depending primarily on the nature of the innovation). If a drug product receives marketing exclusivity, FDA will not approve (or, in limited cases, even receive) an ANDA for the drug product during that time period.

TABLE 1.—ESTIMATED ANNUAL REPORTING BURDEN¹

21 CFR Section	Number of Respondents	Number of Responses per Respondent	Total Annual Responses	Hours per Response	Total Hours
PATENT INFORMATION 314.50(h) 314.53 314.70(e)	85	3.8	325	2	650
PATENT CERTIFICATION INFORMATION 314.50(i) 314.94(a)(12)	97	3.4	331	2	662
NOTICE OF CERTIFICATION OF INVALIDITY OR NON-INFRINGEMENT OF A PATENT 314.52 314.95	37	2	75	16	1,200

TABLE 1.—ESTIMATED ANNUAL REPORTING BURDEN¹—Continued

21 CFR Section	Number of Respondents	Number of Responses per Respondent	Total Annual Responses	Hours per Response	Total Hours
MARKETING EXCLUSIVITY INFORMATION 314.50(j) 314.54(a)(1)(vii) 314.70(f)	92	2.7	250	2	500
NOTIFICATION OF DATE OF COMMERCIAL MARKETING; ENTRY OF THE ORDER OR JUDGEMENT; FILING OF LEGAL ACTION 314.107(c)(4),(e)(2)(iv),(f)(2), and (f)(3) TOTAL	34	2	71	1	71 3,083

¹There are no capital costs or operating and maintenance costs associated with this collection.

Dated: December 26, 2000.

Margaret M. Dotzel,

Associate Commissioner for Policy.

[FR Doc. 01-45 Filed 1-2-01; 8:45 am]

BILLING CODE 4160-01-F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 00N-1505]

Agency Information Collection Activities; Announcement of OMB Approval; Guidance for Industry on How to Use E-Mail to Submit a Notice of Intent to Slaughter for Human Food Purposes

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that a collection of information entitled "Guidance for Industry on How to Use E-Mail to Submit a Notice of Intent to Slaughter for Human Food Purposes" has been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995.

FOR FURTHER INFORMATION CONTACT: Denver Presley, Office of Information Resources Management (HFA-250), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-827-1472.

SUPPLEMENTARY INFORMATION: In the *Federal Register* of September 21, 2000 (65 FR 57192), the agency announced that the proposed information collection had been submitted to OMB for review and clearance under 44 U.S.C. 3507. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. OMB has now approved the information collection and has assigned OMB control number 0910-0450. The

approval expires on November 30, 2003. A copy of the supporting statement for this information collection is available on the Internet at <http://www.fda.gov/ohrms/dockets>.

Dated: December 26, 2000.

Margaret M. Dotzel,

Associate Commissioner for Policy.

[FR Doc. 01-46 Filed 1-2-01; 8:45 am]

BILLING CODE 4160-01-F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 00N-1489]

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Sterility Requirements for Aqueous-Based Drug Products for Oral Inhalation (Formerly Known and Approved Under Sterility Requirements for Inhalation Solution Products) (OMB Control Number 0910-0353)

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that the proposed collection of information listed below has been submitted to the Office of Management and Budget (OMB) for review and clearance under the Paperwork Reduction Act of 1995.

DATES: Submit written comments on the collection of information by February 2, 2001.

ADDRESSES: Submit written comments on the collection of information to the Office of Information and Regulatory Affairs, OMB, New Executive Office Bldg., 725 17th St. NW., rm. 10235, Washington, DC 20503, Attn: Wendy Taylor, Desk Officer for FDA.

FOR FURTHER INFORMATION CONTACT:

Karen L. Nelson, Office of Information Resources Management (HFA-250), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-827-1482.

SUPPLEMENTARY INFORMATION: In compliance with 44 U.S.C. 3507, FDA has submitted the following proposed collection of information to OMB for review and clearance.

Sterility Requirements for Aqueous-Based Drug Products for Oral Inhalation (Formerly Known and Approved Under Sterility Requirements for Inhalation Solution Products) (OMB Control Number 0910-0353)

Sections 314.70(b) and 314.97 (21 CFR 314.70(b) and 314.97) require that all aqueous-based drug products for oral inhalation, including those currently approved, be manufactured sterile. Respondents will be required to submit a supplemental application under § 314.70(b) or § 314.97, describing their new manufacturing process for achieving sterility of their aqueous-based drug products for oral inhalation. FDA needs this information to determine compliance with this new regulation and will use information collected to make decisions on approval of supplemental applications.

Based on new information collected by its contractor, ERG, FDA has revised its estimate of the number of respondents in the original proposal for reporting and recordkeeping burden. Because the respondents have changed, the estimate of the total hours have changed. In the proposed rule it was estimated that there were 5 manufacturers, while the final rule estimates there are 8 manufacturers with 11 nonsterile products based on new data collected by ERG. However, four of the manufacturers are projected to cease manufacturing, leaving four companies manufacturing seven products. These companies are projected to cease manufacturing because they may lack

the in-house technical capability to convert their operations or might find the prospective investments in sterile production technologies to be unattractive. Because each nonsterile product will require an annual report (21 CFR 314.81(b)(2)(iv)), the number of annual responses for nonsterile products has increased to seven. Based on a review of FDA's past experience with applicants submitting supplemental applications under § 314.97, we estimate 160 hours to

prepare a supplemental application. Therefore, due to the increased estimate of respondents, the total hours for the annual reporting burden for manufacturers of nonsterile products has increased from 800 hours in the proposed rule to 1,120 hours in the final rule. The agency's review of the estimated reporting burden for manufacturers of sterile products in the proposed rule and its experience with the annual reporting burden for manufacturers of sterile products

supported the estimate provided in the proposed rule. Therefore, the estimated reporting burden for manufacturers of sterile products is the same as in the proposed rule.

Respondents to this information collection are businesses engaged in the manufacture of aqueous-based drug products for oral inhalation.

FDA estimates the burden of this collection of information as follows:

TABLE 1.—ESTIMATED ANNUAL REPORTING BURDEN¹

21 CFR Section	No. of Respondents	Annual Frequency per Response	Total Annual Responses	Hours per Response	Total Hours
314.97	7	1	7	160	1,120 ²
314.70	2	1	2	20	40 ³
Total					1,160

¹ There are no capital costs or operating and maintenance associated with this collection of information.

² Reporting burden for manufacturers of nonsterile products.

³ Reporting burden for manufacturers of sterile products.

Because of the estimated increase from the proposed rule to the final rule in the number of respondents for nonsterile products, the number of recordkeepers in the recordkeeping burden of table 2 has increased by two from the proposed rule. FDA estimated

a total of seven recordkeepers in the proposed rule and now estimates a total of nine recordkeepers as a result of new data collected by ERG. The proposed rule estimated 2 hours per record, and FDA's review of that estimate and its experience with the control and

validation of microbiological contamination supports this proposed estimate. Therefore, the total number of hours for the recordkeeping burden has increased from 14 hours to 18 hours.

TABLE 2.—ESTIMATED ANNUAL RECORDKEEPING BURDEN

21 CFR Section	No. of Record-keepers	Annual Frequency per Record-keepers	Total Annual Records	Hours per Record	Total Hours
211.113(b)	9	1	9	2	18
Total					18

In the **Federal Register** of September 18, 2000 (65 FR 56314), the agency requested comments on the proposed collections of information. No comments were received.

Dated: December 26, 2000.

Margaret M. Dotzel,

Associate Commissioner for Policy.

[FR Doc. 01-48 Filed 1-2-01; 8:45 am]

BILLING CODE: 4160-01-S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 99F-2081]

Troy Corp.; Filing of Food Additive Petition; Amendment

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is amending the filing notice for a food additive petition filed by Troy Corp. to indicate that the petitioner has proposed that the food additive regulations be amended to provide for the safe use of butanedioic acid, sulfo-1,4-diisodecyl ester, ammonium salt as a surface active agent in adhesives, in pressure-sensitive adhesives, and in paper and paperboard intended to contact food.

FOR FURTHER INFORMATION CONTACT:

Mark A. Hepp, Center for Food Safety and Applied Nutrition (HFS-215), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-418-3098.

SUPPLEMENTARY INFORMATION: In a notice published in the **Federal Register** of July 2, 1999 (64 FR 36021), FDA announced that a food additive petition (FAP 9B4678) had been filed by Troy Corp., c/o S. L. Graham & Associates, 1801 Peachtree Lane, Bowie, MD 20721. The petition proposed to amend the

food additive regulations in § 175.125 *Pressure-sensitive adhesives* (21 CFR 175.125) to provide for the safe use of butanedioic acid, sulfo-1,4-diisodecyl ester, ammonium salt as a surface active agent in pressure sensitive adhesives.

Subsequent to the publication of the filing notice, the petition was amended to include a proposal to further amend the food additive regulations in 21 CFR 175.105 *Adhesives*, 21 CFR 176.170 *Components of paper and paperboard in contact with aqueous and fatty food*, 21 CFR 176.180 *Components of paper and paperboard in contact with dry foods*, and 21 CFR 178.3400 *Emulsifiers and/or surface active agents* to provide for the safe use of butanedioic acid, sulfo-1,4-diisodecyl ester, ammonium salt as a surface active agent in adhesives, and in paper and paperboard intended to contact food.

Therefore, FDA is amending the filing notice of July 2, 1999, to indicate that the petitioner requests that the food

additive regulations be amended to provide for the safe use of butanedioic acid, sulfo-1,4-diisodecyl ester, ammonium salt as a surface active agent in adhesives, in pressure sensitive adhesives, and in paper and paperboard intended to contact food.

The agency had previously determined under 21 CFR 25.32(i) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

Dated: November 22, 2000.

Alan M. Rulis,

*Director, Office of Premarket Approval,
Center for Food Safety and Applied Nutrition.*
[FR Doc. 01-47 Filed 1-2-01; 8:45 am]

BILLING CODE 4160-01-F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Care Financing Administration

[HCFA-2089-N]

RIN 0938-AK33

State Children's Health Insurance Program; Final Allotments to States, the District of Columbia, and U.S. Territories and Commonwealths for Fiscal Year 2001

AGENCY: Health Care Financing Administration (HCFA), HHS.

ACTION: Notice.

SUMMARY: This notice sets forth the final allotments of Federal funding available to each State, the District of Columbia, and each U.S. Territory and Commonwealth for fiscal year (FY) 2001 under title XXI of the Social Security Act (the Act).

Established by section 4901 of the Balanced Budget Act of 1997, and amended by the Medicare, Medicaid and SCHIP Balanced Budget Refinement Act of 1999, title XXI of the Act authorizes payment of Federal matching funds to States, the District of Columbia, and U.S. Territories and Commonwealths to initiate and expand health insurance coverage to uninsured, low-income children under a new State Children's Health Insurance Program (SCHIP). States may implement SCHIP through a separate State program under title XXI, an expansion of a State Medicaid program under title XIX, or a combination of both.

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FOR FURTHER INFORMATION CONTACT:

Richard Strauss, (410) 786-2019.

SUPPLEMENTARY INFORMATION:

I. Purpose of This Notice

This notice sets forth the allotments available to each State, the District of Columbia, and each U.S. Territory and Commonwealth for FY 2001 under title XXI of the Social Security Act (the Act).

Final allotments for a fiscal year are available to match expenditures under an approved State child health plan for 3 fiscal years, including the year for which the final allotment was provided. Federal funds appropriated for title XXI are limited, and the law specifies a formula to divide the total annual appropriation into individual allotments available for each State, the District of Columbia, and each U.S. Territory and Commonwealth with an approved child health plan.

Section 2104(b) of the Act indicates that "the Secretary shall allot to each State * * * with a State child health plan approved under this title." This language requires States, the District of Columbia, and U.S. Territories and Commonwealths to have an approved child health plan for the fiscal year in order for the Secretary to provide an allotment for that fiscal year. All States, the District of Columbia, and U.S. Territories and Commonwealths had approved plans at the beginning of FY 2001. Therefore, the FY 2001 allotments contained in this notice pertain to all States, the District of Columbia, and U.S. Territories and Commonwealths.

II. Methodology for Determining Final Allotments for States, the District of Columbia, and U.S. Territories and Commonwealths

This notice specifies in the Table under section III, the final FY 2001 allotments available to individual States, the District of Columbia, and U.S. Territories and Commonwealths for child health assistance expenditures under approved State child health plans. As discussed below, the FY 2001 final allotments have been calculated to reflect the methodology for determining an allotment amount for each State, the District of Columbia, and each U.S. Territory and Commonwealth as prescribed by the Balanced Budget Refinement Act of 1999 (BBRA) (Pub. L. 106-113), enacted on November 29, 1999.

Section 2104(a) of title XXI provides that, for purposes of providing allotments to the 50 States and the District of Columbia, the following amounts are appropriated:

\$4,295,000,000 for FY 1998;
\$4,275,000,000 for each FY 1999 through FY 2001; \$3,150,000,000 for each FY 2002 through 2004;
\$4,050,000,000 for each FY 2005 through 2006; and \$5,000,000,000 for FY 2007. However, under section 2104(c) of the Act, 0.25 percent of the total amount appropriated each year is available for allotment to the U.S. Territories and Commonwealths of Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Northern Mariana Islands. The total amounts are allotted to the U.S. Territories and Commonwealths according to the following percentages: Puerto Rico, 91.6 percent; Guam, 3.5 percent; the Virgin Islands, 2.6 percent; American Samoa, 1.2 percent; and the Northern Mariana Islands, 1.1 percent.

For FY 2001, title XXI, as amended by the BBRA, provides an additional \$34,200,000 for allotment to the U.S. Territories and Commonwealths. Therefore, the total amount available for allotment to the U.S. Territories and Commonwealths in FY 2001 is \$44,887,500 (that is, \$34,200,000 plus \$10,687,500 (0.25 percent of the FY 2001 appropriation of \$4,275,000,000)).

Furthermore, under sections 4921 and 4922 of the Balanced Budget Act of 1997 (BBA) (Public Law 105-33), enacted on August 5, 1997, the total amount available for allotment to the 50 States and the District of Columbia is reduced by an additional total of \$60,000,000; \$30,000,000 to the Public Health Service for a special diabetes research program for children with Type I diabetes, and \$30,000,000 for special diabetes

programs for Indians. The diabetes programs are funded from FYs 1998 through 2002 only.

Therefore, the total amount available nationally for allotment for the 50 States and the District of Columbia for FY 2001 was determined in accordance with the following formula:

$$A_T = S_{2104(a)} - T_{2104(c)} - D_{4921} - D_{4922}$$

A_T = Total amount available for allotment to the 50 States and the District of Columbia for the fiscal year.

$S_{2104(a)}$ = Total appropriation for the fiscal year indicated in section 2104(a) of the Act. For FY 2001, this is \$4,275,000,000.

$T_{2104(c)}$ = Total amount available for allotment for the U.S. Territories and Commonwealths; determined under section 2104(c) of the Act as 0.25 percent of the total appropriation for the 50 States and the District of Columbia. For FY 2001, this is: $.0025 \times \$4,275,000,000 = \$10,687,500$.

D_{4921} = Amount of grant for research regarding Type I Diabetes under section 4921 of the BBA. This is \$30,000,000 for each of the fiscal years 1998 through 2002.

D_{4922} = Amount of grant for diabetes programs for Indians under section 4922 of the BBA. This is \$30,000,000 for each of the fiscal years 1998 through 2002.

Therefore, for FY 2001, the total amount available for allotment to the 50 States and the District of Columbia is \$4,204,312,500. This was determined as follows:

$$\begin{aligned} A_T (\$4,204,312,500) = & S_{2104(a)} (\$4,275,000,000) - \\ & T_{2104(c)} (\$10,687,500) - \\ & D_{4921} (\$30,000,000) - \\ & D_{4922} (\$30,000,000) \end{aligned}$$

For purposes of the following discussion, the term "State," as defined in section 2104(b)(1)(D)(ii) of the Act, "means one of the 50 States or the District of Columbia."

Under section 2104(b) of the Act, as amended by BBRA, the determination of the Number of Children for a fiscal year is based on the three most recent March supplements to the Current Population Survey (CPS) of the Bureau of the Census officially available before the beginning of the calendar year in which the fiscal year begins. The determination of the State Cost Factor is based on the Annual Average Wages Per Employee in the health services industry, which is determined by the most recent 3 years of such wage data reported by the Bureau of Labor Statistics (BLS) of the Department of Labor officially available prior to the

beginning of the calendar year in which the fiscal year begins. Therefore, for FY 2001 we are using the most recent official data from the Bureau of the Census and the BLS, respectively, available prior to January 1 of calendar year 2000 because FY 2001 begins on October 1, 2000; that is, in calendar year 2000.

Number of Children

For FY 2001, as specified by section 2104(b)(2)(A)(iii) of the Act, the Number of Children is calculated as the sum of 50 percent of the number of low-income, uninsured children in the State, and 50 percent of the number of low-income children in the State. The Number of Children factor for each State is developed by the Bureau of the Census based on the standard methodology used to determine official poverty status and uninsured status in the annual CPS on these topics. As part of a continuing formal process between HCFA and the Bureau of the Census, each fiscal year HCFA obtains the Number of Children data officially from the Bureau of the Census.

Under section 2104(b)(2)(B) of the Act, the Number of Children for each State (provided in thousands) was determined and provided by the Bureau of the Census based on the arithmetic average of the number of low-income children and low-income children with no health insurance as calculated from the three most recent March supplements to the CPS officially available from the Bureau of the Census before the beginning of the 2000 calendar year. In particular, through December 31, 1999, the most recent official data available from the Bureau of the Census on the numbers of children were data from the three March CPSs conducted in March 1997, 1998, and 1999 (representing data for years 1996 through 1998).

State Cost Factor

The State Cost Factor is based on annual average wages in the health services industry in the State. The State Cost Factor for a State is equal to the sum of: 0.15, and 0.85 multiplied by the ratio of the annual average wages in the health industry per employee for the State to the annual wages per employee in the health industry for the 50 States and the District of Columbia.

Under section 2104(b)(3)(B) of the Act, as amended by the BBRA, the State Cost Factor for each State for a fiscal year is calculated based on the average of the annual wages for employees in the health industry for each State as reported, determined, available as final, and provided to HCFA by the BLS in the

Department of Labor for each of the most recent 3 years available before the beginning of the calendar year in which the fiscal year begins. For example, FY 2001 begins on October 1, 2000; that is, FY 2001 begins during calendar year 2000. Therefore, the State cost factor for FY 2001 is based on the most recent 3 years of BLS data officially available as final before January 1, 2000 (the beginning of the calendar year in which FY 2001 begins); that is, it would be based on the BLS data available as final through December 31, 1999. In accordance with these requirements, we used the final State Cost Factor data available from BLS for 1995, 1996, and 1997 in calculating the FY 2001 final allotments.

The State Cost Factor is determined based on the calculation of the ratio of each State's average annual wages in the health industry to the national average annual wages in the health care industry. Because BLS is required to suppress certain State-specific data in providing HCFA with the State-specific average wages per health services industry employee due to the Privacy Act, HCFA calculated the national average wages directly from the State-specific data provided by BLS. As part of a continuing formal process between HCFA and the BLS, each fiscal year HCFA obtains these wage data officially from the BLS.

Under section 2104(b)(4) of the Act, as amended by the BBRA, each State and the District of Columbia is allotted a "proportion" of the total amount available nationally for allotment to the States. The term "proportion" is defined in section 2104(b)(4)(D)(i) of the Act and refers to a State's share of the total amount available for allotment for any given year. In order for the entire total amount available to be allotted to the States, the sum of the proportions for all States must exactly equal one. Under the statutory definition, a State's proportion for a fiscal year is equal to the State's allotment for the fiscal year divided by the total amount available nationally for allotment. In general, a State's allotment for a fiscal year is calculated by multiplying the State's proportion for the fiscal year by the national total amount available for allotment for that fiscal year in accordance with the following formula:

$$SA_i = P_i \times A_T$$

SA_i = Allotment for a State or District of Columbia for a fiscal year.

P_i = Proportion for a State or District of Columbia for a fiscal year.

A_T = Total amount available for allotment to the 50 States and the District of Columbia for the fiscal

year. For FY 2001, this is \$4,204,312,500.

In accordance with the amended statutory formula for determining allotments, the State proportions are determined under two steps, which are described below in further detail.

Under the first step, each State's proportion is calculated by multiplying the State's Number of Children and the State Cost Factor to determine a "product" for each State. The products for all States are then summed. Finally, the product for a State is divided by the sum of the products for all States, thereby yielding the State's preadjusted proportion.

Application of Floors and Ceilings

Under the second step, the preadjusted proportions are subject to the application of proportion floors, ceilings, and a reconciliation process, as appropriate. The amended SCHIP statute specifies three proportion floors, or minimum proportions, that apply in determining States' allotments. The first proportion floor is equal to \$2,000,000 divided by the total of the amount available nationally for the fiscal year. This proportion ensures that a State's minimum allotment would be \$2,000,000. For FY 2001, no State's preadjusted proportion is below this floor. The second proportion floor is equal to 90 percent of the allotment proportion for the State for the previous fiscal year; that is, a State's proportion for a fiscal year must not be lower than 10 percent below the previous fiscal year's proportion. The third proportion floor is equal to 70 percent of the allotment proportion for the State for FY 1999; that is, the proportion for a fiscal year must not be lower than 30 percent below the FY 1999 proportion.

Each State's allotment proportion for a fiscal year is limited by a maximum ceiling amount, equal to 145 percent of the State's proportion for FY 1999; that is, a State's proportion for a fiscal year must be no higher than 45 percent above the State's proportion for FY 1999. The floors and ceilings are intended to minimize the fluctuation of State allotments from year to year and over the life of the program. The floors and ceilings on proportions are not applicable in determining the allotments of the U.S. Territories and Commonwealths; they receive a fixed percentage specified in the statute of the total allotment available to the U.S. Territories and Commonwealths.

As determined under the first step, which is applied prior to the application of any floors or ceilings, the sum of the proportions for all the States and the District of Columbia will be equal to

exactly one. However, the application of the floors and ceilings under the second step may change the proportions for certain States; that is, some States' proportions may need to be raised to the floors, while other States' proportions may need to be lowered to the maximum ceiling. If this occurs, the sum of the proportions for all States and the District of Columbia may not exactly equal one. In that case, the statute requires that the proportions will need to be adjusted, under a method that is determined by whether the sum of the proportions is greater or less than one.

The sum of the proportions would be greater than one if the application of the floors and ceilings resulted in raising the proportions of some States (due to the floors) to a greater degree than the proportions of other States were lowered (due to the ceiling). If, after application of the floors and ceiling, the sum of the proportions is greater than one, the amended statute requires the Secretary to determine a maximum percentage increase limit, which, when applied to the State proportions, would result in the sum of the proportions being exactly one.

If, after the application of the floors and ceiling, the sum of the proportions is less than one, the States' proportions must be increased in a "pro rata" manner so that the sum of the proportions again equals one. It is also possible, although unlikely, that the sum of the proportions (after the application of the floors and ceiling) will be exactly one, and therefore, the proportions would require no further adjustment.

Determination of Preadjusted Proportions

The following is an explanation of how HCFA applied the two State-related factors specified in the statute to determine the States' preadjusted proportions for FY 2001. The term "preadjusted," as used here, refers to the States' proportions prior to the application of the floors and ceiling and adjustments, as specified in the amended SCHIP statute. The determination of each State and the District of Columbia's preadjusted proportion for FY 2001 is in accordance with the following formula:

$$PP_i = (C_i \times SCF_i) / \sum (C_i \times SCF_i)$$

PP_i = Preadjusted proportion for a State or District of Columbia for a fiscal year.

C_i = Number of children in a State (section 2104(b)(1)(A)(i) of the Act) for a fiscal year. This number is based on the number of low-income children for a State for a fiscal year

and the number of low-income uninsured children for a State for a fiscal year determined on the basis of the arithmetic average of the number of such children as reported and defined in the three most recent March supplements to the CPS of the Bureau of the Census, officially available before the beginning of the calendar year in which the fiscal year begins. (See section 2104(b)(2)(B) of the Act.)

For fiscal year 2001, the number of children is equal to the sum of 50 percent of the number of low-income uninsured children in the State for the fiscal year and 50 percent of the number of low-income children in the State for the fiscal year. (See section 2104(b)(2)(A)(iii) of the Act.)

SCF_{in} = State cost factor for a State (section 2104(b)(1)(A)(ii) of the Act). For a fiscal year, this is equal to:

$$0.15 + 0.85 \times (W_i / W_N)$$

W_i = The annual average wages per employee for a State for such year (section 2104(b)(3)(A)(ii)(I) of the Act).

W_N = The annual average wages per employee for the 50 States and the District of Columbia (section 2104(b)(3)(A)(ii)(II) of the Act).

The annual average wages per employee for a State or for all States and the District of Columbia for a fiscal year is equal to the average of such wages for employees in the health services industry (SIC 80), as reported by the BLS of the Department of Labor for each of the most recent three years officially available before the beginning of the calendar year in which the fiscal year begins. (See section 2104(b)(3)(B) of the Act.)

$(C_i \times SCF_i)$ = The sum of the products of $(C_i \times SCF_i)$ for each State (section 2104(b)(1)(B) of the Act).

The resulting proportions would then be subject to the application of the floors and ceilings specified in the amended SCHIP statute and reconciled, as necessary, to eliminate any deficit or surplus of the allotments because the sum of the proportions was either greater than or less than one.

Section 2104(e) of the Act requires that the amount of a State's allotment for a fiscal year be available to the State for a total of 3 years; the fiscal year for which the State child health plan is approved and the 2 following fiscal years. Section 2104(f) of the Act requires the Secretary to establish a process for redistribution of the amounts of States' allotments that are not expended during the 3-year period to States that have fully expended their allotments.

III. Table of State Children's Health Insurance Program Final Allotments for FY 2001

Key to Table

Column/Description

Column A=Name of State, District of Columbia, U.S. Commonwealth or Territory.

Column B=Number of Children. The Number of Children for each State (provided in thousands) was determined and provided by the Bureau of the Census based on the arithmetic average of the number of low-income children and low-income uninsured children, and is based on the three most recent March supplements to the CPS of the Bureau of the Census officially available before the beginning of the calendar year in which the fiscal year begins. The FY 2001 allotments were based on the 1997, 1998, and 1999 March supplements to the CPS. These data represent the number of people in each State under 19 years of age whose family income is at or below 200 percent of the poverty threshold appropriate for that family, and who are reported to be not covered by health insurance. The Number of Children for each State was developed by the Bureau of the Census based on the standard methodology used to determine official poverty status and uninsured status in their annual March CPSs on these topics.

For FY 2001, the Number of Children is equal to the sum of 50 percent of the number of low-income uninsured children in the State and 50 percent of the number of low-income children in the State.

Column C=State Cost Factor. The State Cost Factor for a State is equal to

the sum of: 0.15, and 0.85 multiplied by the ratio of the annual average wages in the health industry per employee for the State to the annual wages per employee in the health industry for the 50 States and the District of Columbia. The State Cost Factor for each State was calculated based on such final wage data for each State as reported, determined, and officially available to HCFA by the BLS in the Department of Labor for each of the most recent 3 years before the beginning of the calendar year in which the fiscal year begins. The FY 2001 allotments were based on final BLS wage data for 1995, 1996, and 1997.

Column D=Product. The Product for each State was calculated by multiplying the Number of Children in Column B by the State Cost Factor in Column C. The sum of the Products for all 50 States and the District of Columbia is below the Products for each State in Column D. The Product for each State and the sum of the Products for all States provides the basis for allotment to States and the District of Columbia.

Column E=Proportion of Total. This is the calculated percentage share for each State of the total allotment available to the 50 States and the District of Columbia. The Percent Share of Total is calculated as the ratio of the Product for each State in Column D to the sum of the products for all 50 States and the District of Columbia below the Products for each State in Column D.

Column F=Adjusted Proportion of Total. This is the calculated percentage share for each State of the total allotment available after the application of the floors and ceilings and after any further reconciliation needed to ensure that the sum of the State proportions is equal to one. The three floors specified

in the amended statute are: (1) a floor of \$2,000,000 divided by the total of the amount available for all allotments for the fiscal year; (2) an annual floor of 90 percent of (that is, 10 percent below) the preceding fiscal year's allotment proportion; and (3) a cumulative floor of 70 percent of (that is, 30 percent below) the FY 1999 allotment proportion. There is also a cumulative ceiling of 145 percent of (that is, 45 percent above) the FY 1999 allotment proportion.

Column G=Allotment. This is the SCHIP allotment for each State, Commonwealth, or Territory for the fiscal year. For each of the 50 States and the District of Columbia, this is determined as the Adjusted Proportion of Total in Column F for the State multiplied by the total amount available for allotment for the 50 States and the District of Columbia for the fiscal year.

For each of the U.S. Territory and Commonwealths, the allotment is determined as the Proportion of Total in Column E multiplied by the total amount available for allotment to the U.S. Territories and Commonwealths. For the U.S. Territories and Commonwealths, the Proportion of Total in Column E is specified in section 2104(c) of the Act. The total amount is then allotted to the U.S. Territories and Commonwealths according to the percentages specified in section 2104 of the Act. There is no adjustment made to the allotments of the U.S. Territories and Commonwealths as they are not subject to the application of the floors and ceiling. As a result, Column F in the table, the Adjusted Proportion of Total, is empty for the U.S. Territories and Commonwealths.

STATE CHILDREN'S HEALTH INSURANCE PROGRAM

A State	B Number of children (000)	C State cost factor	D Product	E Proportion of total ³	F Adjusted proportion of total ³	G Allotment ¹
Allotments for Federal Fiscal Year: 2001						
Alabama	302	0.9659	291.71	1.52	1.83	\$77,012,259
Alaska	41	1.0392	42.61	0.22	0.18	7,760,462
Arizona	542	1.0514	569.88	2.96	2.96	124,519,004
Arkansas	277	0.8931	246.94	1.28	1.28	53,957,231
California	2,905	1.1108	3,226.23	16.77	18.21	765,547,705
Colorado	204	1.0017	204.34	1.06	1.06	44,648,559
Connecticut	162	1.1165	180.31	0.94	0.94	39,379,724
Delaware	51	1.0889	54.99	0.29	0.22	9,071,840
Districe of Columbia	42	1.2960	53.78	0.28	0.28	11,751,544
Florida	978	1.0305	1,007.86	5.24	5.76	224,044,718
Georgia	621	0.9953	618.09	3.21	3.21	135,053,332
Hawaii	74	1.1690	85.92	0.45	0.24	10,076,456
Idaho	110	0.8893	97.83	0.51	0.43	17,887,730
Illinois	787	0.9966	783.85	4.07	3.28	138,022,569
Indiana	298	0.9234	274.71	1.43	1.50	63,161,480
Iowa	178	0.8469	150.76	0.78	0.78	32,940,215
Kansas	154	0.8719	134.27	0.70	0.70	29,337,719

STATE CHILDREN'S HEALTH INSURANCE PROGRAM—Continued

A State	B Number of children (000)	C State cost factor	D Product	E Proportion of total ³	F Adjusted proportion of total ³	G Allotment ¹
Kentucky	276	0.9276	256.02	1.33	1.33	55,939,972
Louisiana	396	0.8876	351.06	1.82	2.17	91,130,730
Maine	68	0.9049	61.53	0.32	0.32	13,444,691
Maryland	225	1.0460	235.34	1.22	1.31	55,202,678
Massachusetts	292	1.0495	305.92	1.59	1.15	48,252,963
Michigan	573	1.0074	576.71	3.00	2.45	103,166,689
Minnesota	255	0.9824	250.02	1.30	0.76	31,986,711
Mississippi	289	0.8882	256.24	1.33	1.33	55,987,988
Missouri	326	0.9204	299.59	1.56	1.38	58,207,299
Montana	83	0.8415	69.42	0.36	0.31	13,224,992
Nebraska	102	0.8563	87.34	0.45	0.40	16,742,374
Nevada	120	1.1954	143.45	0.75	0.75	31,344,200
New Hampshire	58	0.9826	56.99	0.30	0.30	12,452,305
New Jersey	403	1.1237	452.28	2.35	2.35	98,823,044
New Mexico	219	0.9225	201.56	1.05	1.34	56,407,772
New York	1,360	1.0841	1,473.80	7.66	6.85	287,950,908
North Carolina	501	0.9899	495.95	2.58	2.13	89,562,475
North Dakota	48	0.8697	41.31	0.21	0.14	5,678,153
Ohio	675	0.9650	650.87	3.38	3.10	130,369,218
Oklahoma	262	0.8523	222.88	1.16	1.83	76,764,895
Oregon	228	1.0063	229.45	1.19	1.05	44,068,679
Pennsylvania	638	0.9969	636.01	3.31	3.15	132,309,145
Rhode Island	44	0.9785	42.57	0.22	0.23	9,570,566
South Carolina	294	1.0055	295.61	1.54	1.54	64,591,234
South Dakota	43	0.0873	37.42	0.19	0.19	8,177,039
Tennessee	446	0.9991	445.11	2.31	1.77	74,518,279
Texas	2,028	0.9277	1,880.82	9.77	11.96	502,812,459
Utah	153	0.9059	138.14	0.72	0.65	27,306,505
Vermont	29	0.8696	25.22	0.13	0.09	3,982,509
Virginia	350	0.9885	345.50	1.80	1.80	75,491,290
Washington	314	0.9467	296.78	1.54	1.25	52,561,622
West Virginia	108	0.8961	96.77	0.50	0.50	21,145,730
Wisconsin	241	0.9438	226.99	1.18	1.09	45,771,172
Wyoming	38	0.8779	32.92	0.17	0.17	7,193,664
Total States only			19,241.72	100.00	100.00	4,204,312,500
Allotments for commonwealths and territories ²						
Puerto Rico				91.60		41,116,950
Guam				3.50		1,571,063
Virgin Islands				2.60		1,167,075
American Samoa				1.20		538,650
N. Mariana Islands				1.10		493,763
Total Commonwealths and Territories only				100.00		44,887,500
Total States and Commonwealths and Territories						4,249,200,000

¹ Total amount available for allotment to the 50 States and the District of Columbia is \$4,204,312,500; determined as the fiscal year appropriation (\$4,275,000,000) reduced by the total amount available for allotment to the Commonwealths and Territories under section 2104(c) of the Act (\$10,687,500) and amounts for Special Diabetes Grants (\$60,000,000) under sections 4921 and 4922 of BBA.

² Total amount available for allotment to the Commonwealths and Territories is \$10,687,500 (determined as .25 percent of \$4,275,000,000, the fiscal year appropriation) plus \$34,200,000 as specified in section 2104(c)(4)(B) of the Act.

³ Percent share of the total amount available for allotment to the Commonwealths and Territories is a specified in section 2104(c) of the Social Security Act.

IV. Impact Statement

We have examined the impact of this notice as required by Executive Order 12866. Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when rules are necessary, to select regulatory approaches that maximize net benefits (including potential economic environments, public health

and safety, other advantages, distributive impacts, and equity). We believe that this notice is consistent with the regulatory philosophy and principles identified in the Executive Order. The formula for the allotments is specified in the statute. Since the formula is specified in the statute, we have no discretion in determining the allotments.

The Unfunded Mandates Reform Act of 1995 requires that agencies prepare an assessment of anticipated costs and benefits before publishing any notice that may result in an annual expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted each year for inflation) in any one year. Because participation in the SCHIP program on the part of States is

voluntary, any payments and expenditures States make or incur on behalf of the program that are not reimbursed by the Federal government are made voluntarily. This notice will not create an unfunded mandate on States, tribal, or local governments. Therefore, we are not required to perform an assessment of the costs and benefits of these regulations.

Under Executive Order 12612, Federalism, we have reviewed this notice and determined that it does not significantly affect States' rights, roles, and responsibilities.

Low-income children will benefit from payments under this program through increased opportunities for health insurance coverage.

We believe this notice will have an overall positive impact by informing States, the District of Columbia, and U.S. Territories and Commonwealths of the extent to which they are permitted to expend funds under their child health plans using their FY 2001 allotments.

In accordance with the provisions of Executive Order 12866, this notice was reviewed by the Office of Management and Budget.

(Section 1102 of the Social Security Act (42 U.S.C. 1302))

(Catalog of Federal Domestic Assistance Program No. 00.000, State Children's Health Insurance Program)

Dated: October 10, 2000.

Michael M. Hash,

Acting Administrator, Health Care Financing Administration.

Dated: October 25, 2000.

Donna E. Shalala,

Secretary.

[FR Doc. 01-69 Filed 1-2-01; 8:45 am]

BILLING CODE 4120-01-P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-4561-N-83]

Notice of Submission of Proposed Information Collection to OMB; Mortgagee's Application for Insurance Benefits (Multifamily Mortgagee)

AGENCY: Office of the Chief Information Officer, HUD.

ACTION: Notice.

SUMMARY: The proposed information collection requirement described below has been submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act. The Department is soliciting public comments on the subject proposal.

DATES: *Comments Due Date:* February 2, 2001.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Comments should refer to the proposal by name and/or OMB approval number (2502-0419) and should be sent to: Joseph F. Lackey, Jr., OMB Desk Officer, Office of Management and Budget, Room 10235, New Executive Office Building, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT:

Wayne Eddins, Reports Management Officer, Q, Department of Housing and Urban Development, 451 Seventh Street, Southwest, Washington, DC 20410; e-mail Wayne.Eddins@HUD.gov; telephone (202) 708-2374. This is not a toll-free number. Copies of the proposed forms and other available documents submitted to OMB may be obtained from Mr. Eddins.

SUPPLEMENTARY INFORMATION: The Department has submitted the proposal for the collection of information, as

described below, to OMB for review, as required by the Paperwork Reduction Act (44 U.S.C. Chapter 35). The Notice lists the following information: (1) The title of the information collection proposal; (2) the office of the agency to collect the information; (3) the OMB approval number, if applicable; (4) the description of the need for the information and its proposed use; (5) the agency form number, if applicable; (6) what members of the public will be affected by the proposal; (7) how frequently information submissions will be required; (8) an estimate of the total number of hours needed to prepare the information submission including number of respondents, frequency of response, and hours of response; (9) whether the proposal is new, an extension, reinstatement, or revision of an information collection requirement; and (10) the name and telephone number or an agency official familiar with the proposal and of the OMB Desk Officer for the Department.

This Notice also lists the following information:

Title of Proposal: Mortgagee's Application for Insurance Benefits (Multifamily Mortgage).

OMB Approval Number: 2502-0419.

Form Numbers: HUD-2747.

Description of the Need for the Information and Its Proposed Use: This form collects data required for cancellation of multifamily mortgage insurance contracts and payments of mortgage insurance premiums.

Respondents: Business or other for-profit, Federal Government, State, Local, or Tribal Government.

Frequency of Submission: On occasion.

Reporting Burden:

	Number of respondents	×	Frequency of response	×	Hours per response	=	Burden hours HUD
HUD-2747	215		1		.08		18

Total Estimated Burden Hours: 18.

Status: Reinstatement, with change.

Authority: Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. 35, as amended.

Dated: December 27, 2000.

Wayne Eddins,

*Departmental Reports Management Officer,
Office of the Chief Information Officer.*

[FR Doc. 01-122 Filed 1-2-01; 8:45 am]

BILLING CODE 4210-01-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-4644-N-01]

Federal Property Suitable as Facilities To Assist the Homeless

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Notice.

SUMMARY: This Notice identifies unutilized, underutilized, excess, and surplus Federal property reviewed by

HUD for suitability for possible use to assist the homeless.

EFFECTIVE DATE: January 3, 2001.

FOR FURTHER INFORMATION CONTACT:

Clifford Taffet, Department of Housing and Urban Development, Room 7262, 451 Seventh Street SW., Washington, DC 20410; telephone (202) 708-1234; TTY number for the hearing- and speech-impaired (202) 708-2565, (these telephone numbers are not toll-free), or call the toll-free Title V information line at 1-800-927-7588.

SUPPLEMENTARY INFORMATION: In accordance with the December 12, 1988 court order in *National Coalition for the Homeless v. Veterans Administration*, No. 88-2503-OG (D.D.C.), HUD publishes a Notice, on a weekly basis, identifying unutilized, underutilized, excess and surplus Federal buildings and real property that HUD has reviewed for suitability for use to assist the homeless. Today's Notice is for the purpose of announcing that no additional properties have been determined suitable or unsuitable this week.

Dated: December 28, 2000.

John D. Garrity,

Director, Office of Special Needs Assistance Programs.

[FR Doc. 01-121 Filed 1-2-01; 8:45 am]

BILLING CODE 4210-29-M

DEPARTMENT OF THE INTERIOR

National Park Service

National Register of Historic Places; Notification of Pending Nominations

Nominations for the following properties being considered for listing in the National Register were received by the National Park Service before December 23, 2000. Pursuant to § 60.13 of 36 CFR part 60, written comments concerning the significance of these properties under the National Register criteria for evaluation may be forwarded to the National Register, National Park Service, 1849 C St., NW., NC400, Washington, DC 20240. Written comments should be submitted by January 18, 2001.

Patrick Andrus,

Acting Keeper of the National Register.
Arizona

Pima County, Todd, Charles S., House, 11511 E. Speedway Blvd., Tucson, 00001673.

California

Contra Costa County, SS Red Oak Victory (victory ship), 1500 Dornan Dr, Terminal One, Port of Richmond, Richmond, 00001674.

Florida

Palm Beach County, Pine Ridge Hospital, 1401 Division Ave., West Palm Beach, 00001675.

Iowa

Cass County, Nishnabotna Ferry House, W. Minnesota St., Lewis, 00001676.

Johnson County, Ashton, Ned, House, 820 Park Rd., Iowa City, 00001677.

Mitchell County, Deering, Nathaniel Cobb and Lucetia Baily, House, 903 State St., Osage, 00001678.

Palo Alto County, Grotto of the Redemption, 300 N. Broadway, West Bend, 00001679.

Plymouth County, Reeves Farmstead Historic District, 15991 IA 60, LeMars, 00001680.

Winneshiek County, Decorah Woolen Mill, 107 Court St., Decorah, 00001681.

Missouri

Jackson County, Kansas City Terminal Railway Company Roundhouse Historic District, Jct. of 27th St. and Southwest Blvd., Kansas City, 00001682.

New York,

Bronx County, Hertlein and Schlatter Silk Trimmings Factory, 454-464 E. 148th St., Cattaraugus County. St. Stephen's Episcopal Church Complex, 109 S. Barry St., Olean, 00001684.

Herkimer County, Route 29 Stone Arch Bridge, NY 29, Middleville, 00001685. Madison County, Coolidge Stores Building, (Cobblestone Architecture of New York State MPS), US 20, Bouckville, 00001686.

Montgomery County, Amsterdam City Hall, 61 Church St., Amsterdam, 00001687.

Niagara County, Niagara Falls City Hall, 745 Main St., Niagara Falls, 00001688.

Onondaga County, Edwards, O.M., Building, 501 Plum St., Syracuse, 00001689.

Schuyler County, Logan Methodist Church, Jct. of Cty. Rts. 4 and 2, Logan, 00001690.

Sullivan County, Rivoli Theatre, Jct. of NY 42 and Laurel Ave., South Fallsburg, 00001691.

Wayne County, Wolcott Square Historic District, W. Main, Park, and New Hartford Sts., Wolcott, 00001692.

[FR Doc. 01-49 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-70-P

DEPARTMENT OF THE INTERIOR

National Park Service

National Wild and Scenic River System: Ohio; Big and Little Darby Creeks

AGENCY: National Park Service, Interior.

ACTION: Notice of correction.

SUMMARY: The **Federal Register** notice dated Tuesday, November 21, 2000, page 69959, was submitted prematurely. This notice is hereby cancelled.

FOR FURTHER INFORMATION CONTACT:

Angie Tornes, Rivers, Trails and Conservation Assistance Program, National Park Service, Midwest Field Office, 310 West Wisconsin Street, Suite

100E, Milwaukee, Wisconsin 53202; or telephone 414-297-3605.

Dated: December 19, 2000.

David N. Given,

Deputy Director, Midwest Region.

[FR Doc. 01-50 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-70-P

DEPARTMENT OF THE INTERIOR

National Park Service

Federal Land Managers' Air Quality Related Values Work Group (FLAG)

AGENCY: National Park Service, Interior.

ACTION: Notice of availability of final report.

SUMMARY: The National Park Service, in cooperation with the U.S. Fish and Wildlife Service and the U.S. Department of Agriculture Forest Service, is announcing the availability of the final FLAG Phase I Report, and the accompanying Response to Public Comments document.

At the request of permit applicants and State and Federal permit review authorities, the Federal Land Managers (FLMs) (*i.e.*, National Park Service, U.S. Fish and Wildlife Service, and U.S. Department of Agriculture Forest Service) formed the Federal Land Managers' Air Quality Related Values Work Group (FLAG) to develop a more consistent approach for evaluating air pollution effects on their resources. The FLAG effort focused on how air pollutants, such as ozone, particulate matter, nitrogen dioxide, sulfur dioxide, nitrates, and sulfates, could affect the health and status of resources in areas managed by the three agencies. FLAG formed subgroups that concentrated on four issues: (1) Terrestrial effects of ozone; (2) aquatic and terrestrial effects of wet and dry pollutant deposition; (3) visibility; and (4) process and policy issues. The final report contains issue-specific technical and policy analyses, recommendations for evaluating air quality related values, and guidelines for completing and evaluating new source review permit applications. In developing the final recommendations and guidelines, the FLMs considered public comments received at a public meeting and during a 90-day public comment period. The FLMs have prepared a companion report that summarizes and responds to the public comments received.

The FLMs recognize that permit applications may be at various stages of preparation, and may be based on previous guidance provided by the FLMs. Therefore, to "grandfather" those

applications from the newly recommended guidance, the FLMs have established the following phase-in schedule for implementing the FLAG guidance. The FLMs expect that modeling protocols received after March 1, 2001, for applications to be submitted after April 1, 2001, follow the recommendations and guidance provided in the FLAG report. For complete permit applications and modeling protocols received after April 1, 2001, the FLMs expect the application/protocol to follow the recommendations and guidance provided in the FLAG report. Please note that although the FLAG report contains a wealth of information and will be a very useful tool, it is only guidance, not a rule. To expedite the FLMs' review of permit applications, the FLMs strongly encourage all permit applicants and permitting authorities to prepare and review new source permit applications in accordance with the FLAG guidance. To do otherwise will likely result in delays in the permitting process.

DATES: The FLMs expect new complete permit applications and modeling protocols submitted after April 1, 2001, to follow the recommendations and guidance provided in the FLAG report. This will facilitate the FLMs' review of these applications and protocols.

ADDRESSES: A copy of the final FLAG Phase I Report and the accompanying Response to Public Comments document can be downloaded from the Internet at: <http://www.aqd.nps.gov/ard/flagfree/>. A copy can also be obtained from John Bunyak, Air Resources Division, National Park Service, P.O. Box 25287, Denver, Colorado, 80225; e-mail: john_bunyak@nps.gov.

FOR FURTHER INFORMATION CONTACT: John Bunyak at the above addresses or by calling (303) 969-2818.

Dated: December 20, 2000.

Mark Scruggs,

Acting Chief, Air Resources Division.

[FR Doc. 01-51 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-70-P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Agency Information Collection; Proposed Revisions to a Currently Approved Information Collection; Comment Request

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of renewal of a currently approved collection (OMB No. 1006-0005).

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Bureau of Reclamation (we, our, or us) intends to submit a request for renewal (with revisions) of an existing approved information collection to the Office of Management and Budget (OMB): Individual Landholder's and Farm Operator's Certification and Reporting Forms for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428, OMB Control Number: 1006-0005. This information collection is required under the Reclamation Reform Act of 1982 (RRA), Acreage Limitation Rules and Regulations, 43 CFR part 426, and Information Requirements for Certain Farm Operations In Excess of 960 Acres and the Eligibility of Certain Formerly Excess Land, 43 CFR part 428. We request your comments on the revised RRA forms and specific aspects of the information collection.

DATES: Your written comments must be received on or before March 5, 2001.

ADDRESSES: You may send written comments to the Bureau of Reclamation, Attention: D-5200, PO Box 25007, Denver, CO 80225-0007.

Department of the Interior practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

FOR FURTHER INFORMATION CONTACT: You may request copies of the proposed revised forms by writing to the above address or by contacting Stephanie McPhee at: (303) 445-2897.

SUPPLEMENTARY INFORMATION:

Changes to the RRA Forms and the Instructions to Those Forms

We made a few editorial changes to the current RRA forms and the instructions to the forms that are

designed to increase the respondents' understanding of the forms, instructions to the forms, and what information is required to be submitted with the forms to the districts. The proposed revisions to the RRA forms will be included starting in the 2002 water year.

Title: Individual Landholder's and Farm Operator's Certification and Reporting Forms for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428.

Abstract: This information collection requires certain landholders (direct or indirect landowners or lessees) and farm operators to complete forms demonstrating their compliance with the acreage limitation provisions of Federal reclamation law. These forms are submitted to districts who use the information to establish each landholder's status with respect to landownership limitations, full-cost pricing thresholds, lease requirements, and other provisions of Federal reclamation law. In addition, forms are submitted by certain farm operators to provide information concerning the services they provide and the nature of their farm operating arrangements. All landholders whose entire westwide landholdings total 40 acres or less are exempt from the requirement to submit RRA forms. Landholders who are "qualified recipients" have RRA forms submittal thresholds of 80 acres or 240 acres depending on the district's RRA forms submittal threshold category where the land is held. Only farm operators who provide multiple services to more than 960 acres held in trusts or by legal entities are required to submit forms.

Frequency: Annually.

Respondents: Landholders (direct or indirect landowners or lessees) and farm operators of certain lands in our projects, whose landholdings exceed specified RRA forms submittal thresholds.

Estimated Total Number of Respondents: 19,202.

Estimated Number of Responses per Respondent: 1.02.

Estimated Total Number of Annual Responses: 19,586.

Estimated Total Annual Burden on Respondents: 14,829 hours.

ESTIMATED OF BURDEN FOR EACH FORM

Form No.	Burden estimate per form (minutes)	Number of respondents	Annual number of responses	Annual burden on respondents (hours)
Form 7-2180	60	5,358	5,465	5,465
Form 7-2180EZ	45	537	548	411
Form 7-2181	78	1,758	1,793	2,331
Form 7-2184	45	40	41	31
Form 7-2190	60	1,910	1,948	1,948
Form 7-219EZ	45	113	115	86
Form 7-2191	78	891	909	1,182
Form 7-2194	45	4	4	3
Form 7-21PE	66	205	209	230
Form 7-21TRUST	60	1,331	1,358	1,358
Form 7-VERIFY	12	6,452	6,581	1,316
Form 7-21FC	30	243	248	124
Form 7-21XS	30	164	167	84
Form 7-21FARMOP	78	196	200	260

Comments

Comments are invited on:

(a) Whether the proposed collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;

(b) The accuracy of our burden estimate for the proposed collection of information;

(c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

Dated: December 18, 2000.

Wayne O. Deason,

Associate Director, Office of Policy.

[FR Doc. 01-22 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-MN-P

DEPARTMENT OF THE INTERIOR**Bureau of Reclamation**

**Agency Information Collection;
Proposed Revisions to a Currently
Approved Information Collection;
Comment Request**

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of renewal of a currently approved collection (OMB No. 1006-0006).

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44

U.S.C. 3501 *et seq.*), the Bureau of Reclamation (we, our, or us) intends to submit a request for renewal (with revisions) of an existing approved information collection to the Office of Management and Budget (OMB): Certification Summary Form, Reporting Summary Form for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428, OMB Control Number: 1006-0006. This information collection is required under the Reclamation Reform Act of 1982 (RRA), Acreage Limitation Rules and Regulations, 43 CFR part 426, and Information Requirements for Certain Farm Operations In Excess of 960 Acres and the Eligibility of Certain Formerly Excess Land, 43 CFR part 428. We request your comments on the revised RRA forms and specific aspects of the information collection.

DATES: Your written comments must be received on or before March 5, 2001.

ADDRESSES: You may send written comments to the Bureau of Reclamation, Attention: D-5200, PO Box 25007, Denver, CO 80225-0007.

Department of the Interior practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of

organizations or businesses, available for public disclosure in their entirety.

FOR FURTHER INFORMATION CONTACT: You may request copies of the proposed revised forms by writing to the above address or by contacting Stephanie McPhee at: (303) 445-2897.

SUPPLEMENTARY INFORMATION:

Changes to the RRA Forms and the Instructions to Those Forms

The changes made to the current Form 7-21SUMM-C, Form 7-21SUMM-R, and the corresponding instructions, clarify the completion instructions for these forms (for example, completing the RRA forms in ink, and dating and initialing corrections). Other changes to the forms and the corresponding instructions are editorial in nature and are designed to increase the respondents' understanding of the forms and the corresponding instructions. The proposed revisions to the RRA forms will be effective in the 2002 water year.

Title: Certification Summary Form, Reporting Summary Form for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428.

Abstract: These forms are to be used by district offices to summarize individual landholder (direct or indirect landowner or lessee) and farm operator certification and reporting forms as required by the RRA, 43 CFR part 426, and 43 CFR part 428. This information allows us to establish water user compliance with Federal reclamation law.

Frequency: Annually.

Respondents: Contracting entities that are subject to the acreage limitation provisions of Federal reclamation law.

Estimated Total Number of Respondents: 276.

Estimated Number of Responses per Respondent: 1.25.

Estimated Total Number of Annual Responses: 345.

*Estimated Total Annual Burden on Respondents: 13,800 hours.
Estimate of Burden for Each Form:*

ESTIMATED OF BURDEN FOR EACH FORM

Form No.	Burden estimate per form (minutes)	Number of respondents	Annual number of responses	Annual burden on respondents (hours)
7-21SUMM-C and associated tabulation sheets	40	222	278	11,120
7-21SUMM-R and associated tabulation sheets	40	54	67	2,680

Comments

Comments are invited on:

(a) Whether the proposed collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;

(b) The accuracy of our burden estimate for the proposed collection of information;

(c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

Dated: December 18, 2000.

Wayne O. Deason,

Associate Director, Office of Policy.

[FR Doc. 01-23 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-MN-P

DEPARTMENT OF THE INTERIOR**Bureau of Reclamation****Agency Information Collection Activities; Proposed New Information Collection; Comment Request**

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of proposed new information collection.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Bureau of Reclamation (we, our, or us) intends to submit the following proposed new information collection to the Office of Management and Budget (OMB): Limited Recipient Identification Sheet, Trust Information Sheet for Acreage Limitation, 43 CFR part 426. This information collection is required by provisions under the Reclamation

Reform Act of 1982 (RRA) and Acreage Limitation Rules and Regulations, 43 CFR part 426. We request your comments on the proposed RRA forms and specific aspects of the information collection.

DATES: Your written comments must be received on or before March 5, 2001.

ADDRESSES: You may send written comments to the Bureau of Reclamation, Attention: D-5200, PO Box 25007, Denver, CO 80225-0007.

Department of the Interior practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

FOR FURTHER INFORMATION CONTACT: You may request copies of the proposed forms by writing to the above address or by contacting Stephanie McPhee at: (303) 445-2897.

SUPPLEMENTARY INFORMATION:

Title: Limited Recipient Identification Sheet, Trust Information Sheet for Acreage Limitation, 43 CFR part 426.

Abstract: Identification of limited recipients.

Some entities that receive Reclamation irrigation water may believe themselves to be under the RRA threshold and consequently, may not submit the appropriate RRA form(s). However, some of these entities may in fact have a different RRA forms submittal threshold than what they believe it to be due to the number of natural persons benefitting from each entity and the location of the land held

by each entity. In addition, some entities that are exempt from the requirement to submit RRA forms due to the size of their landholdings may in fact be receiving Reclamation irrigation water for which the full-cost rate must be paid because the start of Reclamation irrigation water deliveries occurred after October 1, 1981 [43 CFR 426.6(b)(2)]. The information obtained through completion of the Limited Recipient Identification Sheet allows us to establish entities' compliance with Federal reclamation law. The proposed Limited Recipient Identification Sheet will be disbursed at our discretion.

Trust Review

We are required to review and approve all trusts [43 CFR 426.7(b)(2)] in order to ensure trusts meet the regulatory criteria specified in 43 CFR 426.7. Land held in trust generally will be attributed to the beneficiaries of the trust rather than the trustee if the criteria are met. When we become aware of trusts with a relatively small landholding (40 acres or less), we may extend to those trusts the option to complete and submit for our review the proposed Trust Information Sheet instead of actual trust documents. If we find nothing on the completed, proposed Trust Information Sheet that would warrant the further investigation of a particular trust, that trustee will not be burdened with submitting trust documents to us for in-depth review.

Frequency: Generally, these forms will be submitted once per identified entity or trust. Each year, we expect new responses in accordance with the following numbers.

Respondents: Entity landholders and trusts identified by Reclamation that are subject to the acreage limitation provisions of Federal reclamation law.

Estimated Total Number of Respondents: 1,105.

Estimated Number of Responses per Respondent: 1.0.

Estimated Total Number of Annual Responses: 1,105.

Estimated Total Annual Burden on Respondents: 92 hours.

Estimate of Burden for Each Form:

ESTIMATED OF BURDEN FOR EACH FORM

Form No.	Burden estimate per form (minutes)	Number of respondents	Annual number of responses	Annual burden on respondents (hours)
Limited recipient identification sheet	5	635	635	53
Trust information sheet	5	470	470	39

Comments

Comments are invited on:

(a) Whether the proposed new collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;

(b) The accuracy of our burden estimate for the proposed new collection of information;

(c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

Dated: December 18, 2000.

Wayne O. Deason,

Associate Director, Office of Policy.

[FR Doc. 01-24 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-MN-P

DEPARTMENT OF THE INTERIOR**Office of Surface Mining Reclamation and Enforcement****Watershed Cooperative Agreement Program**

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Notice of availability of funds for the Watershed Cooperative Agreement Program.

SUMMARY: The Office of Surface Mining Reclamation and Enforcement (OSM) of the U.S. Department of the Interior is announcing its intent to solicit applications from eligible, not-for-profit candidates for funding under the Watershed Cooperative Agreement Program to undertake local acid mine drainage reclamation projects.

DATES: Applications for the cooperative agreements should be submitted to the appropriate individual listed under

ADDRESSES AND FURTHER INFORMATION

starting January 3, 2001. Applications will be accepted until all available funds have been awarded.

ADDRESSES AND FURTHER INFORMATION:

Requests for an application package, which includes further information on the program, the application forms and evaluation criteria, should be directed to the appropriate Appalachian Clean Streams Coordinator: *Alabama:* Jeannie O'Dell, Birmingham Field Office, 135 Gemini Circle, Suite 215, Homewood, AL 35209, Telephone 205-290-7282, ext. 21; *Illinois:* Ken Foit, Indianapolis Field Office, Minton-Capehart Federal Building, 575 N. Pennsylvania Street, Room 392, Indianapolis, IN 46204, Telephone 317-226-6166 ext 230;

Indiana: Michael Kalagian, Indianapolis Field Office, Minton-Capehart Federal Building, 575 N. Pennsylvania Street, Room 392, Indianapolis, IN 46204, Telephone 317-226-6166 ext 234; *Iowa:* Stephen Preston, Mid-Continent Regional Coordinating Center, Alton Federal Center, 501 Belle Street, Room 216, Alton, IL 62002, Telephone 618-463-6463 ext 120; *Kentucky:* Dave Beam, Lexington Field Office, 2675 Regency Road, Lexington, KY 40503, Telephone 859-260-8400; *Maryland:* Peter Hartman, Appalachian Regional Coordinating Center, 3 Parkway Center, Pittsburgh, PA 15220, Telephone 412-937-2905; *Missouri:* Jeff Gillespie, Mid-Continent Regional Coordinating Center, Alton Federal Center, 501 Belle Street, Room 216, Alton, IL 62002, Telephone 618-463-6463 ext 128; *Ohio:* Max Luehrs, Columbus Area Office, 4480 Refugee Road, Suite 201, Columbus, OH 43232, Telephone 614-866-0578 ext. 110; *Oklahoma:* Daniel Trout, Tulsa Field Office, 5100 East Skelly Drive S-550, Tulsa, OK 74135, Telephone 918-581-6430 ext 25; *Pennsylvania:* David Hamilton, Harrisburg Field Office, 415 Market Street, Suite 3, Harrisburg, PA 17101, Telephone 717-782-2285; *Tennessee:* Danny Ellis, Knoxville Field Office, 530 Gay Street, Suite 500, Knoxville, TN 37902, Telephone 423-545-4193 ext 147; *Virginia:* Ronnie Vicens, Big Stone Gap Field Office, 1941 Neeley Road, Suite 201, Compartment 116, Big Stone Gap, VA 24219, Telephone 540-523-5053; *West Virginia:* Rick Buckley, Charleston Field

Office, 1027 Virginia Street East, Charleston, WV 25301, Telephone 304-347-7162 ext 3024.

SUPPLEMENTARY INFORMATION: For Fiscal Year 2001, OSM expects to award up to 2.75 million dollars to eligible not-for-profit groups to undertake actual construction projects to clean up streams impacted by acid mine drainage. The maximum award amount for each cooperative agreement normally will be \$100,000. The cooperative agreements will have a performance period of two years. The funds primarily are to be used for the construction phase of the project; however, any cost (administrative or construction) associated with the completion of the project is allowable. The requested OSM funding must be the final amount necessary to complete the project. There must be demonstrated public support for the project.

Eligible applicants are not-for-profit, established organizations with IRS 501(c)(3) status. Applicants must have other partners, contributing either the funding or in-kind services needed to complete the project.

Projects in the following States are eligible: Alabama, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, Ohio, Oklahoma, Pennsylvania, Tennessee, Virginia and West Virginia. Projects must meet eligibility criteria for coal projects outlined in Section 404 of the Surface Mining Control and Reclamation Act of 1977:

Lands and water eligible for reclamation or drainage abatement expenditures under this title are those which were mined for coal or which were affected by such mining, wastebanks, coal processing, or other coal mining processes * * * and abandoned or left in an inadequate reclamation status prior to the date of enactment of this Act [August 3, 1977], and for which there is no continuing reclamation responsibility under State or other Federal laws.

The project must produce tangible results, e.g., fishery restored, stream miles improved, educational and community benefit, pollutants removed from the streams. There must be a plan

to address any ongoing operation/maintenance considerations.

Two copies of a complete application should be submitted to the appropriate Appalachian Clean Streams Coordinator identified under **ADDRESSES** and **FURTHER INFORMATION**. Awards are subject to the availability of funds. Applications will receive technical and financial management reviews.

Dated: December 26, 2000.

Kathrine L. Henry,

Acting Director Office of Surface Mining Reclamation and Enforcement.

[FR Doc. 01-75 Filed 1-2-01; 8:45 am]

BILLING CODE 4310-05-M

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act and Federal Water Pollution Control Act

Notice is hereby given that, consistent with the policy of Section 122(d)(2) of CERCLA, 42 U.S.C. 9622(d)(2), and 28 C.F.R. 50.7, a proposed Partial Consent Decree (the "Decree") in *United States v. ASARCO, et al.*, Civil Action No. 96-0122-N-EJL was lodged on December 28, 2000, with the United States District Court for the District of Idaho. The Decree resolves claims by the United States and the Coeur d'Alene Tribe (the "Tribe") against two of the seven named defendants in this action, Sunshine Mining and Refining Company and Sunshine Precious Metals, Inc. (collectively "the Sunshine defendants"), and potential claims against two of their non-defendant affiliates, Sunshine Argentina, Inc., and Sunshine Exploration, Inc.

The United States' Second Amended Complaint in this action alleges that the Sunshine defendants and other mining companies, including ASARCO, Inc., Hecla Mining Co., Coeur d'Alene Mines, Inc., and Callahan Mining Co., are liable for past and future response costs and natural resource damages at the Bunker Hill Superfund Facility (the "Facility") in the Coeur d'Alene Basin (the "Basin") or northern Idaho, under Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. 9607, and Section 311(f) of the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. 1321(f). Trial on liability, natural resource injury, and causation issues is scheduled to begin on January 22, 2001. On August 23, 2000, however, the Sunshine

defendants, Sunshine Argentina, and Sunshine Exploration (collectively "Sunshine entities") filed petitions in the United States Bankruptcy Court for the District of Delaware for reorganization under Chapter 11 of the Bankruptcy Code. The proposed Decree both resolves the claims pending against the Sunshine defendants in the ASARCO litigation in Idaho and, when approved by the U.S. District Court, allows the Sunshine entities' Chapter 11 reorganization plan to become effective.

Under the proposed Decree, the Sunshine defendants will (1) impose conservation easements on certain environmentally-sensitive timberlands in the Basin and convey title to those lands to an independent trustee, who will later convey title to the United States or the Tribe as they jointly decide; (2) pay royalties to the United States and the Tribe on all mining revenues from the Sunshine defendants' properties in the Basin, at rates tied to the market price of silver; (3) issue to the United States and the Tribe warrants convertible into 9.95 percent of the reorganized Sunshine Mining's stock; and (4) perform certain clean up work at the closed mill structure at the Silver Summit Mine Site owned by Sunshine. The Decree reserves claims by the United States and the tribe for, among other things, response actions on property in the Basin that the Sunshine entities will continue to own.

The Department of Justice will receive comments relating to the proposed Decree until January 11, 2001. This period for comments has been limited in order to allow the parties to seek District Court approval of the Decree before the scheduled start of trial on January 22, 2001. Comments should be addressed to the Assistant Attorney General for the Environment and Natural Resources Division, Department of Justice, 950 Pennsylvania Avenue, NW., Washington, DC 20530, and should refer to *United States v. ASARCO*, DOJ Ref. #90-11-3-128/2. Commenters may request an opportunity for a public meeting in the affected area, in accordance with Section 7003(d) of RCRA, 42 U.S.C. § 6973(d).

The proposed Decree may be examined at the office of the United States Attorney, District of Idaho, 877 W. Main, Suite 201, Boise, Idaho 83702 (208) 334-1211; and the Region X Office of the Environmental Protection Agency, 1200 Sixth Avenue, Seattle, Washington, 98101. A copy of the proposed Decree may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, Washington, DC 20044, or by telephonic request to Mr. Joe Davis at (202) 616-7940. In

requesting a copy of the Consent Decree, please refer to the referenced case and enclose a check in the amount of \$13.50 (25 cents per page reproduction costs), payable to the Consent Decree Library.

Bruce S. Gelber,

Chief, Environmental Enforcement Section, Environment and Natural Resources Division.
[FR Doc. 01-56 Filed 1-2-01; 8:45 am]

BILLING CODE 4410-15-M

MEDICARE PAYMENT ADVISORY COMMISSION

Commission Meeting

AGENCY: Medicare Payment Advisory Commission.

ACTION: Notice of meeting.

SUMMARY: The Commission will hold its next public meeting on Thursday, January 11, 2001, and Friday, January 12, 2001, at the Ronald Reagan Building, International Trade Center, 1300 Pennsylvania Avenue, NW, Washington, DC. The meeting is tentatively scheduled to begin at 10 a.m. on January 11, and at 9 a.m. on January 12.

Topics for discussion include: issues in post-acute care; Medicare+Choice payment policies; hospital inpatient payment issues; updating payments and accounting for new technology in traditional Medicare; rural quality of care; input-price indexes for all health care settings; evaluating Medicare's payment policies; Medicare+Choice in rural areas; end-stage renal disease payment policies in traditional Medicare; beneficiary co-insurance under the new prospective payment system for hospital outpatient department services; access to care in rural areas; special payment provisions for inpatient care in rural hospitals; payments to rural health clinics; and treatment of the initial residency period for combined training programs in Medicare direct graduate medical education payments.

Agendas will be mailed on January 4, 2000. The final agenda will be available on the Commission's website (www.MedPAC.gov)

ADDRESSES: MedPAC's address is: 1730 K Street, NW., Suite 800, Washington, DC 20006. The telephone number is (202) 653-7220.

FOR FURTHER INFORMATION CONTACT: Diane Ellison, Office Manager, (202) 653-7220.

Murray N. Ross,

Executive Director.

[FR Doc. 01-124 Filed 1-2-01; 8:45 am]

BILLING CODE 6820-BW-M

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-286]

Entergy Nuclear Operations, Inc.; Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-64, issued to Entergy Nuclear Operations, Inc., for operation of the Indian Point Nuclear Generating Unit No. 3 (IP3) located in Westchester County, New York.

The proposed amendment would constitute a conversion from the Current Technical Specifications (CTS) to a set of Improved Technical Specifications (ITSs) based on NUREG-1431, "Standard Technical Specifications (STS) for Westinghouse Plants," Revision 1, dated April 1995. NUREG-1431 was developed by the Commission's staff through working groups composed of both NRC staff members and industry representatives, and has been endorsed by the staff as part of an industry-wide initiative to standardize and improve the Technical Specifications (TSs) for nuclear power plants. As part of this submittal, the licensee has applied the criteria contained in the Commission's "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors (Final Policy Statement)," published in the **Federal Register** on July 22, 1993 (58 FR 39132), to the CTS, and, using NUREG-1431 as a basis, proposed an ITS for IP3. The criteria in the Final Policy Statement were subsequently added to 10 CFR 50.36, "Technical Specifications," in a rule change that was published in the **Federal Register** on July 19, 1995 (60 FR 36953) and became effective on August 18, 1995. The licensee requested the conversion amendment in a letter dated December 11, 1998, as supplemented on December 15, 1998, May 17, 1999, August 16, 2000, September 14, 2000, September 27, 2000, and November 30, 2000.

The licensee has categorized the proposed changes to the CTS into four general groupings. These groupings are characterized as administrative changes, relocated changes, more restrictive changes and less restrictive changes.

Administrative changes are those that involve restructuring, renumbering, rewording, interpretation and complex rearranging of requirements and other changes not affecting technical content or substantially revising an operating

requirement. The reformatting, renumbering and rewording process reflects the attributes of NUREG-1431 and does not involve technical changes to the CTS. The proposed changes include: (a) Providing the appropriate numbers, etc., for NUREG-1431 bracketed information (information that must be supplied on a plant-specific basis, and which may change from plant to plant), (b) identifying plant-specific wording for system names, etc., and (c) changing NUREG-1431 section wording to conform to existing licensee practices. Such changes are administrative in nature and do not impact initiators of analyzed events or assumed mitigation of accident or transient events. Relocated changes are those involving relocation of requirements and surveillances for structures, systems, components, or variables that do not meet the criteria for inclusion in TS. Relocated changes are those CTS requirements that do not satisfy or fall within any of the four criteria specified in the 10 CFR 50.36(c)(2)(ii) and may be relocated to appropriate licensee controlled documents.

The licensee's application of the screening criteria is described in the attachment of the licensee's December 11, 1998, submittal, which is entitled, "Application of the NRC Final Policy Statement Selection Criteria to the Indian Point Nuclear Generating Unit No. 3 Technical Specifications" (Split Report) in Volume 1 of the submittal. The affected structures, systems, components or variables are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events. The requirements and surveillances for these affected structures, systems, components, or variables will be relocated from the TSs to administratively controlled documents such as the quality assurance program, the final safety analysis report (FSAR), the ITS BASES, the Technical Requirements Manual (TRM) that is incorporated by reference in the FSAR, the Core Operating Limits Report (COLR), the Offsite Dose Calculation Manual (ODCM), the Inservice Testing (IST) Program, or other licensee-controlled documents. Changes made to these documents will be made pursuant to 10 CFR 50.59 or other appropriate control mechanisms, and may be made without prior NRC review and approval. In addition the affected structures, systems, components, or variables are addressed in existing surveillance procedures that are also subject to 10 CFR 50.59. These proposed changes will

not impose or eliminate any requirements.

More restrictive changes are those involving more stringent requirements compared to the CTS for operation of the facility. These more stringent requirements do not result in operation that will alter assumptions relative to the mitigation of an accident or transient event. The more restrictive requirements will not alter the operation of process variables, structures, systems, and components described in the safety analyses. For each requirement in the STS that is more restrictive than the CTS that the licensee proposes to adopt in the ITS, the licensee has provided an explanation as to why it has concluded that adopting the more restrictive requirement is desirable to ensure safe operation of the facility because of specific design features of the plant.

Less restrictive changes are those where CTS requirements are relaxed or eliminated, or new plant operational flexibility is provided. The more significant "less restrictive" requirements are justified on a case-by-case basis. When requirements have been shown to provide little or no safety benefit, their removal from the TSs may be appropriate. In most cases, relaxations previously granted to individual plants on a plant specific basis were the result of (a) generic NRC actions, (b) new NRC staff positions that have evolved from technological advancements and operating experience, or (c) resolution of the Owners Groups' comments on the Improved Standard Technical Specifications. Generic relaxations contained in NUREG-1431 were reviewed by the staff and found to be acceptable because they are consistent with current licensing practices and NRC regulations. The licensee's design is being reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in NUREG-1431, thus providing a basis for the ITS, or if relaxation of the requirements in the CTS is warranted based on the justification provided by the licensee.

These administrative, relocated, more restrictive, and less restrictive changes to the requirements of the CTS do not result in operations that will alter assumptions relative to mitigation of an analyzed accident or transient event.

In addition to the proposed changes solely involving the conversion, there are also changes proposed that are different to the requirements in both the CTS and the Standard Technical Specifications (STS) NUREG-1431. These proposed beyond-scope issues to the ITS conversion are as follows:

(1) *ITS 3.3 Setpoint and Allowable Changes Associated with the Adoption of the ITS*

The licensee proposes to revise the setpoints or allowable values associated with power range flux, pressurizer pressure, overtemperature delta T, overpower delta T, low reactor coolant loop flow, high pressurizer water level, steam generator water level, containment pressure, auto stop oil pressure, high steam line differential pressure and high steam flow.

(2) *ITS 3.4.11 Pressurizer Power Operated Relief Valves (PORVs)*

The licensee proposes a completion time of 7 days for restoration of an inoperable PORV or block valve as opposed to the 72 hours specified in the STS.

(3) *ITS SR 3.4.14.1 Frequency (DOC M.5)*

The licensee proposes to extend the frequency for the pressure isolation valve leakage testing surveillance from 18 to 24 months. This change also extends PIV leakage testing from 9 months to 12 months.

(4) *ITS 3.6.10, Weld Channel and Penetration Pressurization System (DOC L.1 and M.3)*

The licensee proposes changes to the CTS requirements by focusing on ensuring the safety function (containment integrity) at individual component level rather than conducting repairs to restore zone operability.

(5) *ITS 3.7.2, Inclusion of Main Steam Check Valves (DOC L.1)*

At IP3 each main steam line has one Main Steam Isolation Valve (MSIV) and one Main Steam Check Valve (MSCV). In the STS, TS 3.7.2 conditions address only the MSIV operability. The licensee proposes to add MSCV operability to ITS 3.7.2 Conditions, which requires certain changes and additions to the Required Actions, beyond those in the STS.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

By February 2, 2001, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10

CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific

sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to John Fulton, Assistant General Counsel, Entergy Nuclear Generating Co., Pilgrim Station, 600 Rocky Hill Road, Plymouth, MA 02360, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

If a request for a hearing is received, the Commission's staff may issue the amendment after it completes its technical review and prior to the completion of any required hearing if it publishes a further notice for public comment of its proposed finding of no significant hazards consideration in accordance with 10 CFR 50.91 and 50.92.

For further details with respect to this action, see the application for amendment dated December 11, 1998, as supplemented on December 15, 1998,

May 17, 1999, August 16, 2000, September 14, 2000, September 27, 2000, and November 30, 2000, which are available for public inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>).

Dated at Rockville, Maryland, this 27th day of December 2000.

For the Nuclear Regulatory Commission.

George F. Wunder,

Project Manager, Section I, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 01-103 Filed 1-2-01; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

Draft Regulatory Guide; Issuance, Availability

The Nuclear Regulatory Commission has issued for public comment a draft of a regulatory guide proposed for its Regulatory Guide Series. This series has been developed to describe and make available to the public such information as methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques used by the staff in evaluating specific problems or postulated accidents, and data needed by the staff in its review of applications for permits and licenses.

The draft guide, temporarily identified by its task number, DG-3020 (which should be mentioned in all correspondence concerning this draft guide), is "Guidance for Implementation of 10 CFR 72.48, Changes, Tests, and Experiments." This guide is being developed to provide guidance that is acceptable to the NRC staff for licensees and certificate holders on their evaluation of changes proposed to facilities or cask designs licensed under 10 CFR Part 72.

Comments may be accompanied by relevant information or supporting data. Written comments may be submitted to the Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Copies of comments received may be examined at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Comments will be most helpful if received by January 22, 2001.

You may also provide comments via the NRC's interactive rulemaking website through the NRC home page (<http://www.nrc.gov>). This site provides

the availability to upload comments as files (any format) if your web browser supports that function. For information about the interactive rulemaking website, contact Ms. Carol Gallagher, (301) 415-5905; e-mail CAG@NRC.GOV. For information about the draft guide and the related documents, contact Mr. C.P. Jackson at (301) 415-2947; e-mail CPJ@NRC.GOV.

Although a time limit is given for comments on this draft guide, comments and suggestions in connection with items for inclusion in guides currently being developed or improvements in all published guides are encouraged at any time.

Regulatory guides are available for inspection at the Commission's Public Document Room. The PDR's mailing address is USNRC Public Document Room, Washington, DC 20555; e-mail pdr@nrc.gov. Requests for single copies of draft or final guides (which may be reproduced) or for placement on an automatic distribution list for single copies of future draft guides in specific divisions should be made in writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Reproduction and Distribution Services Section; or by fax to (301) 415-2289, or by e-mail to DISTRIBUTION@NRC.GOV. Telephone requests cannot be accommodated. Regulatory guides are not copyrighted, and Commission approval is not required to reproduce them. (5 U.S.C. 552(a))

Dated at Rockville, Maryland, this 13th day of December 2000.

For the Nuclear Regulatory Commission.

Charles E. Ader,

Director, Program Management, Policy Development and Analysis Staff, Office of Nuclear Regulatory Research.

[FR Doc. 01-102 Filed 1-2-01; 8:45 am]

BILLING CODE 7590-01-P

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 24798; 812-12230]

Securities Management and Research, Inc. and American National Investment Accounts, Inc.; Notice of Application

December 27, 2000.

AGENCY: Securities and Exchange Commission ("Commission").

ACTION: Notice of an application for an order under sections 6(c), 12(d)(1)(J), and 17(b) of the Investment Company Act of 1940 (the "Act") for exemptions from sections 12(d)(1)(A) and (B) and 17(a) of the Act, and under section 17(d)

of the Act and rule 17d-1 under the Act to permit certain joint transactions.

Summary of the Application: The requested order would permit certain registered management investment companies to invest uninvested cash in an affiliated money market fund in excess of the limits in sections 12(d)(1)(A) and (B) of the Act.

Applicants: Securities management and Research, Inc. (the "Adviser"), American National Investment Accounts, Inc. (the "Fund"), and all existing and future portfolios of the Fund.

Filing Dates: The application was filed on August 17, 2000.

Hearing or Notification of Hearing: An order granting the application will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission's Secretary and serving applicant with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on January 22, 2001, and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission's Secretary.

ADDRESSES: Secretary, Commission, 450 Fifth Street, NW., Washington, DC 20549-0609. Applicants, c/o Teresa E. Axelson, Securities Management and Research, Inc., 2450 Southshore Blvd., Suite 400, League City, TX 77573.

FUR FURTHER INFORMATION CONTACT: Paula L. Kashtan, Senior Counsel, at (202) 942-0615, or Mary Kay Frech, Branch Chief, at (202) 942-0564, (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee at the Commission's Public Reference Branch, 450 Fifth Street, NW., Washington, DC 20549-0102 (tel. 202-942-8090).

Applicants' Representations

1. The Fund is a Maryland corporation registered under the Act as an open-end management investment company.¹ The Adviser, a Florida

¹ Any future portfolio of the Fund that may rely on the order in the future will do so only in accordance with the terms and conditions of the application.

corporation and a wholly-owned subsidiary of American National Insurance Company ("American National"), is registered as an investment adviser under the Investment Advisers Act of 1940.² The Adviser serves as the investment adviser for the Fund. The Fund is the investment medium for premium payments received by American National from the sale of variable universal life insurance and variable annuity contracts. The Fund currently offers eight portfolios, including the Money Market Portfolio (the "Portfolios"). The Money Market Portfolio is subject to the requirements of rule 2a-7 under the Act.

2. Applicants state that each Investing Portfolio (as defined below) has, or may be expected to have, cash that has not been invested in portfolio securities ("Uninvested Cash"). Uninvested Cash may result from a variety of sources, including dividends or interest received on portfolio securities, unsettled securities transactions, strategic reserves, matured investments, proceeds from liquidation of investment securities, dividends payments, or money received from investors. A Portfolio that purchases shares of the Money Market Portfolio is referred to as an Investing Portfolio.

3. Applicants request an order to permit each of the Investing portfolios to invest their Uninvested Cash in the Money Market portfolio, and to permit the Money Market Portfolio to sell shares to, and redeem shares from, the Investing Portfolios. Investments of Uninvested Cash in shares of the money market Portfolio will be made only to the extent that such investment is consistent with each investing Portfolio's investment restrictions and policies as set forth in the Fund's prospectus and statement of additional information. Applicants believe that the proposed transactions may reduce transaction costs, create more liquidity, increase returns, and diversify holdings.

Applicants' Legal Analysis

1. Section 12(d)(1)(A) of the Act provides, in pertinent part, that no registered investment company may acquire securities of another investment company if such securities represent more than 3% of the acquired company's outstanding voting stock, more than 5% of the acquiring

company's total assets, or if such securities, together with the securities of other acquired investment companies, represent more than 10% of the acquiring company's total assets. Section 12(d)(1)(B) of the Act, in pertinent part, provides that no registered open-end investment company may sell its securities to another investment company if the sale will cause the acquiring company to own more than 3% of the acquired company's voting stock, or if the sale will cause more than 10% of the acquired company's voting stock to be owned by investment companies.

2. Section 12(d)(1)(J) of the Act provides that the Commission may exempt any person, security, or transaction from any provision of section 12(d)(1) if, and to the extent that, such exemption is consistent with the public interest and the protection of investors. Applicants request relief under section 12(d)(1)(J) from the limitation of sections 12(d)(1)(A) and (B) to permit the Investing Portfolios to invest Uninvested Cash in the Money Market Portfolio.

3. Applicants state that the proposed arrangement would not result in the abuses that sections 12(d)(1)(A) and (B) were intended to prevent. Applicants state that because the Money Market Portfolio will maintain a highly liquid portfolio, an Investing Portfolio will not be in a position to gain undue influence over the Money Market Portfolio. Applicants represent that the proposed arrangement will not result in an inappropriate layering of fees because shares of the Money Market Portfolio sold to the Investing Portfolios will not be subject to a sales load, redemption fee, distribution fee under a plan adopted in accordance with rule 12b-1 under the Act, or service fee (as defined in rule 2830(b)(9) of the National Association of Securities Dealers' ("NASD") Conduct Rules). Applicants represent that the Money Market Portfolio will not acquire securities of any other investment company in excess of the limitations contained in section 12(d)(1)(A) of the Act.

4. Section 17(a) of the Act makes it unlawful for any affiliated person of a registered investment company, or an affiliated person of such person, acting as principal, to sell or purchase any security to or from the company. Section 2(a)(3) of the Act defines an "affiliated person" of an investment company to include, among others, any person directly or indirectly controlling, controlled by, or under common control with the investment company and any investment adviser to the investment company. Applicants state that, because

the Portfolios share a common investment adviser, each Portfolio may be deemed to be under common control with each of the other Portfolios, and thus an affiliated person of each of the other Portfolios. As a result, section 17(a) would prohibit the sale of the shares of the Money Market Portfolio to the Investing Portfolios, and the redemption of the shares by the Money Market Portfolio.

5. Section 17(b) of the Act authorizes the Commission to exempt a transaction from section 17(a) if the terms of the proposed transaction, including the consideration to be paid or received, are reasonable and fair and do not involve overreaching on the part of any person concerned, the proposed transaction is consistent with the policy of each investment company concerned, and the proposed transaction is consistent with the general purposes of the Act. Section 6(c) of the Act permits the Commission to exempt persons or transactions from any provision of the Act if the exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

6. Applicants submit that their request for relief to permit the purchase and redemption of shares of the Money Market Portfolio by the Investing Portfolios satisfied the standards in sections 6(c) and 17(b) of the Act. Applicants note that shares of the Money Market Portfolio will be purchased and redeemed at their net asset value, the same consideration paid and received for these shares by any other shareholder. Applicants state that the Investing Portfolios will retain their ability to invest their Uninvested Cash directly in money market instruments as authorized by their respective investment objectives and policies if they believe they can obtain a higher rate of return, or for any other reason. Applicants also state that the Money Market Portfolio has the right to discontinue selling shares to any of the Investing Portfolios if the Money Market Portfolio's board of directors determines that such sale would adversely affect its portfolio management or operations.

7. Section 17(d) of the Act and rule 17d-1 under the Act prohibit an affiliated person of a registered investment company, acting as principal, from participating in or effecting any transaction in connection with any joint enterprise or joint arrangement in which the investment company participates. Applicants state that each Investing Portfolio, by purchasing shares of the Money Market Portfolio, the Adviser, by managing the

² For purposes of this application, the term "Adviser" includes, in addition to Securities Management and Research, Inc., any other person controlling, controlled by or under common control with Securities Management and Research, Inc., that acts in the future as an investment adviser for the Fund.

assets of the Investing Portfolios investing in the Money Market Portfolio, and the Money Market Portfolio, by selling shares to the Investing Portfolios, could be deemed to be participants in a joint enterprise or arrangement within the meaning of section 17(d) of the Act and rule 17d-1 under the Act.

8. Rule 17d-1 permits the Commission to approve a proposed joint transaction covered by the terms of section 17(d) of the Act. In determining whether to approve a transaction, the Commission is to consider whether the proposed transaction is consistent with the provisions, policies, and purposes of the Act, and the extent to which the participation is on a basis different from or less advantageous than that of other participants. Applicants submit that the investment by the Investing Portfolios in shares of the Money Market Portfolio would be indistinguishable from any other shareholder account maintained by the Money Market Portfolio and that the transactions will be consistent with the Act.

Applicants' Conditions

Applicants agree that any order granting the requested relief will be subject to the following conditions:

1. Shares of the Money Market Portfolio sold to and redeemed by the Investing Portfolios will not be subject to a sales load, redemption fee, distribution fee under a plan adopted in accordance with rule 12b-1 under the Act or a service fee (as defined in rule 2830(b)(9) of the NASD Conduct Rules).

2. If the Adviser collects from the Money Market Portfolio a fee for acting as its investment adviser with respect to assets invested by the Investing Portfolios, before the next meeting of the board of directors of the Fund ("Board") is held for the purpose of voting on an investment advisory contract under section 15 of the Act, the Adviser will provide the Board with specific information regarding the approximate cost to the Adviser for, or portion of the investment advisory fee under the existing advisory agreement attributable to, managing the assets of the Investing Portfolios that can be expected to be invested in the Money Market Portfolio. Before approving any investment advisory contract under section 15, the Board, including a majority of the directors who are not "interested persons," as defined in section 2(a)(19) of the Act, shall consider to what extent, if any, the investment advisory fees charged to the Investing Portfolios by the Adviser should be reduced to account for the investment advisory fees indirectly paid by the Investing Portfolios because of the investment

advisory fee paid by the Money Market Portfolio to the Adviser. The minute books of the Fund will record fully the factors considered by the Board in approving the investment advisory contract, including the considerations of the Board relating to the advisory fees referred to above.

3. Each Investing Portfolio will invest Uninvested Cash in, and hold shares of, the Money Market Portfolio only to the extent that the Investing Portfolio's aggregate investment in the Money Market Portfolio does not exceed 25 percent of the total assets of the Investing Portfolio. For purposes of this limitation, each Investing Portfolio will be treated as a separate investment company.

4. Investment in shares of the Money Market Portfolio will be in accordance with each Investing Portfolio's respective investment restrictions and policies as set forth in the Fund's prospectus and statement of additional information.

5. Each Investing Portfolio and the Money Market Portfolio that may rely on the order will be advised by the Adviser, or a person controlling, controlled by, or under common control with the Adviser.

6. The Money Market Portfolio will not acquire securities of any other investment company in excess of the limits contained in section 12(d)(1)(A) of the Act.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 01-104 Filed 1-2-01; 8:45 am]

BILLING CODE 8010-01-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Agency Information Collection Activity Under OMB Review

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below has been forwarded to the Office of Management and Budget (OMB) for extension of currently approved collection. The ICR describes the nature of the information collection and the expected burden. The **Federal Register** notice with a 60-day comment period

soliciting comments on the following collections of information was published on October 2, 2000 (FR 65, page 58838).

DATES: Comments must be submitted on or before February 2, 2001. A comment to OMB is most effective if OMB receives it within 30 days of publication.

FOR FURTHER INFORMATION CONTACT: Judy Street on (202) 267-9895.

SUPPLEMENTARY INFORMATION:

Federal Aviation Administration (FAA)

Title: Certification, Pilots and Flight Instructors.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 2120-0021.

Form(s): FAA Form 8710-1.

Affected Public: Estimated 125,500 certified pilots.

Abstract: 14 CFR Part 61 prescribes requirements for pilots, flight instructors, and ground instructors. Information collected is used to determine compliance and applicant eligibility.

Estimated Burden Hours: 252,100 burden hours annually.

ADDRESSES: Send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725-17th Street, NW., Washington, DC 20503, Attention FAA Desk Officer.

Comments Are Invited On: Whether the proposed Collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Issued in Washington, DC, on December 26, 2000.

Steve Hopkins,

Manager, Standards and Information Division, APF-100.

[FR Doc. 01-91 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****Notice of Extension of the Public Comment Period for the Chicago Terminal Airspace Project Draft Environmental Impact Statement**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of extension of public comment period.

SUMMARY: The Federal Aviation Administration, Great Lakes Region, is issuing this notice to advise the public that it is extending the public comment period for the Draft Environmental Impact Statement (DEIS) for the Chicago Terminal Airspace Project (CTAP) until February 15, 2001.

FOR FURTHER INFORMATION CONTACT: Ms. Annette Davis, Federal Aviation Administration, Great Lakes Region, Air Traffic Division, 2300 East Devon Avenue, Des Plaines, Illinois, 60018, (847) 294-8091.

SUPPLEMENTARY INFORMATION: The proposed CTAP changes could affect flights to and from airports within the Chicago region, including Chicago O'Hare International Airport, Chicago Midway Airport, Milwaukee Mitchell International Airport, and general aviation reliever airports. The changes proposed by CTAP are designed to improve traffic flows and reduce airborne and ground delays. CTAP would not result in significant adverse impacts to any resource category. Pursuant to requests received by the public, the public comment period associated with the CTAP DEIS has been extended from January 12, 2001, to February 15, 2001. Copies of the CTAP DEIS are available at the following locations:

State of Illinois

Bensenville Public Library, 200 S. Church Rd., Bensenville, IL 60106
Des Plaines Public Library, 841 Graceland Ave., Des Plaines, IL 60016
Eisenhower Public Library, 4652 N. Olcott Ave., Harwood Heights, IL 60656
Elk Grove Village Public Library, 1001 Wellington Ave., Elk Grove Village, IL 60007
Elmhurst Public Library, 211 Prospect Ave., Elmhurst, IL 60126
Franklin Park Public Library, 10311 Grand Ave., Franklin Park, IL 60131
Garfield Ridge Branch Library, 6348 South Archer Ave., Chicago, IL 60638
Harold Washington Library, 400 South State St., 5th Floor, Chicago, IL 60605

Mount Prospect Public Library, 10 S. Emerson St., Mount Prospect, IL 60056
Northlake Public Library, 231 N. Wolf Rd., Northlake, IL 60164
Oriole Park Branch Library, 5201 N. Oketo Ave., Chicago, IL 60656
Park Ridge Public Library, 20 S. Prospect Ave., Park Ridge, IL 60068
Schiller Park Public Library, 4200 Old River Rd., Schiller Park, IL 60176

State of Indiana

Lake County Public Library, 1919 W. 81st Ave., Merrillville, IN 46410-5382

State of Wisconsin

Milwaukee Central Public Library, 814 W. Wisconsin Ave., Milwaukee, WI 53233
Oak Creek Public Library, 8620 S. Howell Ave., Oak Creek, WI 53154

Issued in Des Plaines, Illinois, on December 21, 2000.

Denis C. Burke,

Manager, Airspace Branch, Air Traffic Division, Great Lakes Region.

[FR Doc. 01-90 Filed 1-2-01; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION**Surface Transportation Board**

[STB Docket No. AB-491 (Sub-No. 1X)]

**R.J. Corman Railroad Company/
Pennsylvania Lines, Inc.—
Abandonment Exemption—In
Clearfield and Centre Counties, PA**

On December 14, 2000, R.J. Corman Railroad Company/Pennsylvania Lines, Inc. (RJCP) filed with the Surface Transportation Board (Board) a petition under 49 U.S.C. 10502 for exemption from the provisions of 49 U.S.C. 10903 to abandon approximately 22.7 miles of the Wallaceton Branch in Clearfield and Centre Counties, PA. The segments of the Wallaceton Branch proposed for abandonment are: (1) The Wallaceton Secondary, between approximately milepost 9.2, near Bigler, and approximately milepost 11.7, near Wallaceton; (2) the Mills Industrial Track, between approximately milepost 11.2, near Wallaceton, and approximately milepost 24.5, near Osceola Mills; (3) the Bigler Industrial Track, between approximately mileposts 31.4 and 31.8; (4) the Moshannon-Clearfield Industrial Track, between approximately mileposts 0.0 and 4.0; (5) the Trout Run Branch, between approximately mileposts 0.0 and 2.2; and (6) the Big Run Branch, between approximately mileposts 0.0 and 0.3. The lines traverse U.S. Postal Service

Zip Codes 16825, 16876, 16866, 16666, 16938, 16879, 16942, 16701, 17841, and 17506.

The lines do not contain federally granted rights-of-way. Any documentation in RJCP's possession will be made available promptly to those requesting it.

The interest of railroad employees will be protected by the conditions set forth in *Oregon Short Line R. Co.—Abandonment—Goshen*, 360 I.C.C. 91 (1979).

By issuing this notice, the Board is instituting an exemption proceeding pursuant to 49 U.S.C. 10502(b). A final decision will be issued by April 3, 2001.

Any offer of financial assistance (OFA) under 49 CFR 1152.27(b)(2) will be due no later than 10 days after service of a decision granting the petition for exemption. Each OFA must be accompanied by a \$1,000 filing fee. See 49 CFR 1002.2(f)(25).

All interested persons should be aware that, following abandonment of rail service and salvage of the line, the line may be suitable for other public use, including interim trail use. Any request for a public use condition under 49 CFR 1152.28 or for trail use/rail banking under 49 CFR 1152.29 will be due no later than January 23, 2001. Each trail use request must be accompanied by a \$150 filing fee. See 49 CFR 1002.2(f)(27).

All filings in response to this notice must refer to STB Docket No. AB-491 (Sub-No. 1X) and must be sent to: (1) Surface Transportation Board, Office of the Secretary, Case Control Unit, 1925 K Street, N.W., Washington, DC 20423-0001; and (2) Kevin M. Sheys and Edward J. Fishman, Oppenheimer Wolff & Donnelly LLP, 1350 Eye Street, N.W., Suite 200, Washington, DC 20005-3324. Replies to the RJCP petition are due on or before January 23, 2001.

Persons seeking further information concerning abandonment procedures may contact the Board's Office of Public Services at (202) 565-1592 or refer to the full abandonment or discontinuance regulations at 49 CFR part 1152. Questions concerning environmental issues may be directed to the Board's Section of Environmental Analysis (SEA) at (202) 565-1545. [TDD for the hearing impaired is available at 1-800-877-8339.]

An environmental assessment (EA) (or environmental impact statement (EIS), if necessary) prepared by SEA will be served upon all parties of record and upon any agencies or other persons who commented during its preparation. Other interested persons may contact SEA to obtain a copy of the EA (or EIS). EAs in these abandonment proceedings

normally will be made available within 60 days of the filing of the petition. The deadline for submission of comments on the EA will generally be within 30 days of its service.

Board decisions and notices are available on our website at WWW.STB.DOT.GOV."

Decided: December 22, 2000.

By the Board, David M. Konschnik,
Director, Office of Proceedings.

Vernon A. Williams,
Secretary.

[FR Doc. 01-27 Filed 1-2-01; 8:45 am]

BILLING CODE 4915-00-P

DEPARTMENT OF THE TREASURY

Fiscal Service

Electronic Authentication Policy

AGENCY: Financial Management Service, Fiscal Service, Treasury.

ACTION: Notice of publication of policies and practices for the use of electronic transactions and authentication techniques in Federal payments and collections.

SUMMARY: The Office of Management and Budget (OMB), as part of its procedures to implement the Government Paperwork Elimination Act (GPEA), directed the Department of the Treasury (Treasury) to develop, in consultation with Federal agencies and OMB, policies and practices for the use of electronic transactions and authentication techniques in Federal financial transactions, including payments and collections. In accord with this directive, Treasury is publishing this Electronic Authentication Policy.

FOR FURTHER INFORMATION CONTACT: Gary Grippo, Director, Electronic Commerce, Financial Management Service, Department of the Treasury, 401 14th Street, S.W., Washington, DC 20227, (202) 874-6816, gary.grippo@fms.treas.gov.

SUPPLEMENTARY INFORMATION: The Government Paperwork Elimination Act (GPEA), Public Law 105-227, Title XVII, was signed into law on October 21, 1998. GPEA requires Federal agencies to allow individuals and entities, when practicable, the option of submitting information to or transacting business with the agency by electronic means. On May 2, 2000, the Office of Management and Budget (OMB) issued procedures and guidelines for the implementation of the Act. 65 FR 25508. That guidance directed the Department of the Treasury (Treasury) to develop policies and

practices to be followed by agencies when making Federal payments and collections electronically, as well as other financial transactions. In particular, Treasury was directed to address the authentication of the identity of parties to such transactions, in furtherance of the goals of GPEA in these policies and practices.

Pursuant to this directive, on March 15, 2000, Treasury forwarded to OMB for circulation among Government agencies a draft policy document outlining the principles and guidelines for the use of electronic authentication techniques for Federal payment, collection and collateral transactions. In response to comments received from Government agencies on the draft policy document, Treasury has revised the guidance accordingly. The final policy document is reproduced below.

The most current version of the policy may be found on the Financial Management Service website at: <http://www.fms.treas.gov/eauth/index.html>. Given the rapidly changing nature of electronic commerce, electronic authentication techniques and the related technology infrastructure, Treasury views this policy guidance as a dynamic document which may be revised as necessary, and will accept comments at any time. Changes to this policy will be published as Notices in the **Federal Register**, as necessary, and posted to the FMS website.

Electronic Authentication Policy Payment, Collection, and Collateral Transactions

Background Discussion

Purpose: This policy sets forth principles on the use of electronic authentication techniques, including digital signatures, for Federal payment, collection, and collateral transactions conducted over open networks such as the Internet. Federal payment and collection transactions include all transactions intended to effect a credit or a debit to an account, including transactions executed by Non-Treasury Disbursing Offices. Federal collateral transactions include all electronic messages or instructions to pledge, deposit, release, or claim collateral used to secure public funds. These payment, collection, and collateral transactions may be between the Federal Government and non-Federal entities, as well as transactions between Federal entities.

Scope: This policy applies to applications that use open networks, including the Internet, since access to these networks is unrestricted and Federal users and trading partners must

be authenticated accordingly. This policy is not intended to apply to transactions over closed networks, *i.e.*, legacy financial networks where the networking infrastructure and access to it is owned or controlled by the Government, the Federal Reserve, or private financial institutions.

Focus is also placed on the use of public key cryptographic techniques, which can provide for robust electronic authentication, and on the manner in which Federal agencies must go about obtaining public key digital certificates for payment, collection, and collateral transactions. (It should be noted that in establishing such guidance, our intent is not necessarily to dictate that a particular certification authority provider be used, but rather to try to follow a general principle that offers agencies some choice, particularly where commercial certification authorities must be relied upon). In addition to public key cryptography, the policy covers other forms of remote electronic authentication and electronic signatures, including but not limited to knowledge-based authentication (Personal Identification Numbers (PINs) and passwords) and biometrics.

Goals of Authentication. The goals of authentication are to protect the integrity of Federal payment, collection, and collateral transactions by (1) ensuring that transactions are conducted only by authorized individuals, (2) pinpointing accountability and liability for transactions, (3) providing assurances to the public about the identity of Federal servers and systems on open networks, and (4) receiving assurances about the identity of commercial servers and systems on open networks. The different electronic authentication techniques achieve these goals with varying degrees of robustness.

In addition, the use of the Internet with appropriate electronic authentication techniques offers new opportunities to expand the use of the payments system. For example, digital signatures may allow finance officers to authorize Automated Clearing House (ACH) and wire transfer payments online, permitting the end users access to otherwise closed bank payment networks. These techniques will also permit electronic payments to be made peer-to-peer for the first time, using mechanisms such as electronic checks and electronic cash.

Techniques. Electronic authentication techniques include, but are not limited to, the following:

- Knowledge based authentication, or shared secrets, such as PINs and passwords;

- Biometrics, such as fingerprint, voice, and eye characteristics;
- Secure tokens, such as smart cards;
- Cryptography, including digital signatures, challenge-response protocols (e.g., the "handshake" protocol in Secure Sockets Layer), and message authentication codes;
- Digitized signatures, including digital images of handwritten signatures and signature dynamics (i.e., measurements of the direction, pressure, speed, and other attributes of a handwritten signature).

These electronic authentication techniques provide varying levels of security and non-repudiation. In practice, however, a robust authentication system will make use of multiple techniques in combination, such as the use of a PIN to unlock and apply a digital signature private key held on a smart card. While the scope of this policy is limited to payment, collection, and collateral transactions, these techniques may be applied to other types of financial transactions conducted over open networks, such as secure remote access to financial systems, and transmission of accounting data.

Finally, it is important to note that the policy sets forth a model for determining the robustness of electronic authentication for particular types of transactions, but does not generally dictate that a specific technique or system be used. (The lone exception to this approach is a requirement for public key digital signatures for transactions determined to be in the high risk category.) In this sense, the document is limited to policy guidance, and does not address specific constructs for implementing electronic authentication techniques or supporting their interoperability, such as the potential use of the Federal Bridge Certification Authority in support of interoperating public key infrastructures, or the use of the BioAPI specification for biometric implementations. We recognize, however, that as authentication mechanisms and the ways in which they interoperate mature, it may be appropriate to incorporate additional guidance into the policy. The policy will be updated as necessary as such matters develop.

Electronic Authentication Techniques for Federal Payment, Collection, and Collateral Transactions

Section 1. Title

Use of Electronic Authentication Techniques for Federal Payment, Collection, and Collateral Transactions

Section 2. Scope

This policy applies to all Federal payment, collection, and collateral transactions, as defined herein, conducted over open networks such as the Internet, including those transactions executed by statutory Non-Treasury Disbursing Offices (NTDO) and delegated NTDOs.

Section 3. Definitions

(a) *Banking industry standards* means standards promulgated by the X9 Accredited Standards Committee for Financial Services.

(b) *Certificate* means a secure digital document that binds a public cryptographic key to a person (or organization) in order to provide a measure of proof that the person is who he or she claims to be in a transaction.

(c) *Certification authority* means an entity trusted to issue digital certificates.

(d) *Collateral transaction* means any message, instruction, request, or authorization that is intended to pledge, deposit, move, release, claim, or otherwise manage collateral used to secure public funds.

(e) *Collection* means a transaction entry, object, or instruction, or a transaction request or authorization, that is intended to effect a credit of funds to the Treasury, an account at a Treasury designated depository, or any other account holding public funds.

(f) *Cryptographic credential* means an electronic document or object containing a cryptographic key which provides evidence of authority to conduct a transaction and/or provides assurance that a system or person is what or who it claims to be. A public key digital certificate is an example of a cryptographic credential.

(g) *Delegated NTDO* means a Non-Treasury Disbursing Office whose authority to disburse public funds has been delegated at the discretion of the Treasury.

(h) *Federal standards* means Federal Information Processing Standards (FIPS) promulgated by the National Institute of Standards and Technology (NIST) and standards promulgated by the Treasury Department.

(i) *Financial agent* means a commercial financial institution designated by the Treasury to act as a depository of public money or financial agent of the Government, under the provisions of 31 CFR 202 and 203.

(j) *Fiscal agent* means a Federal Reserve Bank designated by the Treasury to act as a Government depository or fiscal agent.

(k) *Payment* means a transaction entry, object, or instruction, or a

transaction request or authorization, that is intended to effect a debit of funds against the Treasury, an account at a Treasury designated depository, or any other account holding public funds.

(l) *Statutory NTDO* means a Non-Treasury Disbursing Office whose authority to disburse public funds is established by statute.

(m) *Trading partner* means any individual, business, organization, or governmental entity that receives funds or collateral from, or sends funds or collateral to, the Federal Government.

Section 4. General Principles

(a) The Secretary of the Treasury is responsible for promulgating governmentwide policies and practices on the use of electronic authentication techniques, including techniques that rely on public key certificates and other cryptographic credentials, to secure payment, collection, and collateral transactions.

(b) *Financial agents*. All financial agents of the Treasury which use cryptographic authentication in the conduct of Government fiscal operations shall obtain their cryptographic credentials, including certification authority credentials, from the Treasury or, at the discretion of the Treasury, from a fiscal agent.

Example: A commercial bank is designated to operate a new cash concentration system for the Treasury, which will collect funds from various receipt accounts and deposit them into the Treasury. The bank sets up a certification authority to issue certificates to the holders of the receipt accounts so that they can use the Internet to authorize the concentration of their receipts. This bank certification authority would operate under a Treasury "root" certification authority. The Treasury root certification authority would issue a single certificate validating the agent bank certification authority and the bank's status as a designated agent of the Treasury. The agent bank certification authority would in turn issue the end user certificates.

(c) *Fiscal agents*. Fiscal agents that use cryptographic authentication in the conduct of Government fiscal operations shall obtain their cryptographic credentials, including certification authority credentials, from the Treasury or, at the discretion of the Treasury, shall create and use their own cryptographic credentials.

(d) *NTDOs*. All delegated NTDOs that use cryptographic authentication in the issuance of Federal payments shall obtain their cryptographic credentials, including certification authority credentials, from the Treasury. Certification authority credentials may be granted in the form of a subsidiary certification authority certificate, a cross-certificate, or otherwise.

Consistent with this provision, delegated NTDOs may issue end user public key certificates. Statutory NTDOs which use cryptographic authentication in the issuance of Federal payments may create and use their own cryptographic credentials, in accordance with all other provisions of this policy.

(e) All electronic authentication techniques used in support of Federal payment, collection, and collateral transactions must be based on either Federal standards or banking industry standards. To the extent that Federal or banking industry standards are absent, the Treasury may approve the use of other voluntary consensus body standards.

(f) Nothing in this policy is intended to relieve a Federal agency of its responsibility to comply with other Federal systems security guidelines, including OMB Circulars and Federal Information Processing Standards, or to implement appropriate Internet security mechanisms, such as firewalls and intrusion detection programs.

(g) The Fiscal Service of the Treasury, acting on behalf of the Secretary of the Treasury, is responsible for implementing and interpreting this policy.

Section 5. Risk Model

(a) All payment, collection, and collateral transactions must be properly authenticated, in a manner commensurate with the risks of the transaction. For any given Federal agency cash flow or program (e.g., corporate user fees, benefit payments, excise taxes, retail product sales, investment collateral, etc.) Federal agencies shall assess overall risk and determine the appropriate electronic authentication technique in accordance with the following risk model.

(1) The three general factors used to determine the overall risk of Federal payment, collection, and collateral transactions are: risk of monetary loss, reputation risk, and productivity risk.

(2) The risk of monetary loss is determined using a variety of elements, including but not limited to:

(A) Average dollar value of transactions.

(B) Loss to the Government.

(C) Loss to a consumer.

(D) Loss to a business, state or local government, or other trading partner.

(E) Rules for reversing and repudiating a transaction (e.g., in the Uniform Commercial Code, the ACH rules, the Code of Federal Regulations, Federal Reserve regulations, Generally Accepted Accounting Principles, or bank network operating procedures).

(F) Body of law applied to the transaction.

(G) Liability for the transaction (e.g., personal, corporate, insured, or shared).

(3) The reputation risk to the Government in the event of a breach or an improper transaction is determined using elements such as:

(A) Relationship with the trading partner (e.g., debiting a consumer account vs. intragovernmental payment between Federal agencies, and voluntary vs. mandatory transactions).

(B) Public visibility and public perception of programs.

(C) History or patterns of problems or abuses.

(D) Consequences of a breach or improper transaction (e.g., normal exception handling vs. imposition of penalties).

(4) Productivity risk associated with a breach or improper transaction is determined using elements such as:

(A) Time criticality of transactions (e.g., entitlement payment vs. contractor payment).

(B) Scope of system and number of transactions (e.g., national or governmentwide system vs. localized system).

(C) Number of system users or dependents.

(D) Backup and recovery procedures.

(E) Claims and dispute resolution procedures.

(b) Assessing the combined risk factors (monetary loss, reputation risk, and productivity risk) determines the risk category of a cash flow, program, or system. For purposes of Federal payment, collection, and collateral transactions, there are four risk categories: high, moderate, low, and negligible. The risk category indicates the robustness of the electronic authentication technique that must be used. Authentication rules for each of the risk categories are listed below. High and moderate risk transactions require multi-factor authentication, where at least two electronic authentication techniques must be used in combination, such as digital signature with a PIN protecting the signing key.

(1) *High Risk.*

(A) Multi-factor authentication is required, including a digital signature.

(B) Private cryptographic keys must be generated, stored, and used in a secure cryptographic hardware module.

(C) Certification authorities must operate under the Government's direct policy authority.

(2) *Moderate Risk.*

(A) Multi-factor authentication is required.

(B) Private cryptographic keys may be stored in software.

(C) Certification authorities which are under the policy authority of a commercial entity meeting the requirements of this policy may be used.

(3) *Low Risk.* Single factor authentication must be used, such as a PIN or a software based SSL client certificate.

(4) *Negligible Risk.* Transactions may occur without an electronic authentication technique.

(c) Federal agencies must apply the risk categories, determined using the three risk factors, to all payment, collection, and collateral transactions using open networks.

(d) In determining risk categories, Federal agencies should take into account programmatic controls which mitigate the intrinsic risks of conducting transactions over an open network. (For example, a consumer who submits an Internet payment for goods in a Government auction may have to appear in person with identification to retrieve the goods. This may argue for a lower category of risk for the Internet transaction.)

(e) The risk category determined for a set of transactions represents the minimum security required. Federal agencies may apply the requirements of a higher risk category, or a stronger authentication technique, at their option. Agencies should contact Mr. Gary Grippo of the Financial Management Service, (202) 874-6816, gary.grippo@fms.treas.gov, with any questions about the application of this risk-based model.

Section 6. Collections Policies

(a) Federal collections systems and servers that cryptographically authenticate themselves to Federal trading partners during financial transactions must receive their cryptographic credentials from or through the Treasury or the Treasury Financial agent that processes the collection.

Example: An agency sets up a Web site to receive credit card numbers for the payment of fines. A public key certificate on the Web server provides citizens with an assurance that the collection Web site is operated by the Federal Government. Since this is a credit card collection, the agency would obtain its server certificate from one of the Financial Management Service's designated financial agent banks that processes credit cards and makes available to the agency certificates from one or more commercial or government certificate authorities. This financial agent bank is the entity sponsoring the agency into the credit card system and is liable for the agency's transactions.

(b) Federal collections systems and servers that cryptographically authenticate themselves to Federal

trading partners during financial transactions must generate, store, and use their private cryptographic keys in a secure cryptographic hardware module.

(c) In processing collection transactions from Federal trading partners that have a risk category other than "Negligible," Federal agencies shall only trust cryptographic credentials issued or honored by the institution that maintains the trading partner's transaction account, or issued by a Federal agency.

Example: A small business goes to a Federal Web site to enroll in a repayment program for a Federal loan. The business digitally signs an electronic form indicating that the Federal agency may initiate ACH debits against its bank account to repay the loan, and then transmits the signed form along with its certificate to the Federal agency. The Federal agency determines that the certificate was issued by an independent commercial certification authority. The Federal agency rejects the enrollment under this policy, because the certification authority has no connection to the consumer's banking relationship.

Dated: December 22, 2000.

Kenneth R. Papaj,

Acting Commissioner, Financial Management Service.

[FR Doc. 01-79 Filed 1-2-01; 8:45 am]

BILLING CODE 4810-35-P

DEPARTMENT OF THE TREASURY

Office of Thrift Supervision

Submission for OMB Review; Comment Request

December 28, 2000.

The Office of Thrift Supervision (OTS) has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104-13. Interested persons may obtain copies of the submission(s) by calling the OTS Clearance Officer listed. Send comments regarding this information collection to the OMB reviewer listed and to the OTS Clearance Officer, Office of Thrift Supervision, 1700 G Street, NW., Washington, DC 20552.

DATES: Submit written comments on or before February 2, 2001.

OMB Number: 1550-0059.

Form Number: OTS Form 1583.

Type of Review: Regular.

Title: Capital Distribution.

Description: Provides uniform treatment for capital distributions made by savings associations held by holding companies. Ensures adequate supervision of distribution of capital by those savings associations, thereby fostering safety and soundness of the thrift industry.

Respondents: Savings and Loan Associations and Savings Banks.

Estimated Number of Responses: 687.

Estimated Burden Hours Per

Response: 4 hours.

Frequency of Response: Once per occurrence.

Estimated Total Reporting Burden: 2,748 hours.

Clearance Officer: Ralph E. Maxwell, (202) 906-7740, Office of Thrift Supervision, 1700 Street, NW., Washington, DC 20552.

OMB Reviewer: Alexander Hunt, (202) 395-7860, Office of Management and Budget, Room 10202, New Executive Office Building, Washington, DC 20503.

John E. Werner,

Director, Information & Management Services.

[FR Doc. 01-123 Filed 1-2-01; 8:45 am]

BILLING CODE 6720-01-P



Federal Register

**Wednesday,
January 3, 2001**

Part II

Federal Reserve System

12 CFR Part 225

**Regulation Y; Docket Nos. R-1057 and
R-1062; Bank Holding Companies and
Change in Bank Control; Final Rule**

FEDERAL RESERVE SYSTEM**12 CFR Part 225****Regulation Y; Docket Nos. R-1057 and R-1062; Bank Holding Companies and Change in Bank Control**

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: The Board of Governors of the Federal Reserve System has adopted a final rule that implements the financial holding company provisions of the Gramm-Leach-Bliley Act. This final rule replaces the interim rules governing financial holding companies that the Board adopted previously. The final rule describes the procedures a domestic bank holding company and a foreign banking organization must follow and the capital, management, and Community Reinvestment Act requirements they must meet in order to qualify as a financial holding company. The final rule also contains provisions that apply to a financial holding company that subsequently ceases to meet the applicable requirements.

In addition, the final rule lists the activities that the Gramm-Leach-Bliley Act defines as financial in nature and thereby authorizes a FHC to conduct. The final rule contains procedures that apply to a financial holding company that conducts those activities, a procedure that allows any interested party to request that the Board determine, in consultation with the Secretary of the Treasury, that additional activities are financial in nature or incidental to a financial activity and thus permissible for a financial holding company, and a procedure that allows a financial holding company to request the Board's prior approval to conduct an activity that is complementary to a financial activity.

The final rule also amends Regulation Y to define the term "depository institution" and to revise the existing definitions of the terms "well capitalized" and "well managed," and makes conforming and other technical changes.

DATES: The final rule is effective February 2, 2001.

FOR FURTHER INFORMATION CONTACT:

Scott G. Alvarez, Associate General Counsel (202/452-3583), Kathleen M. O'Day, Associate General Counsel (202/452-3786), Ann E. Misback, Assistant General Counsel (202/452-3788); Christopher W. Clubb, Senior Counsel (202/452-3904); Kieran J. Fallon, Senior Counsel (202/452-5270), or Adrienne G.

Threatt, Senior Attorney (202/452-3554), Legal Division; or Betsy Cross, Deputy Associate Director (202/452-2574), Division of Banking Supervision and Regulation; Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, NW., Washington, DC, 20551. For users of Telecommunications Device for the Deaf ("TDD"), contact Janice Simms at 202/452-4984.

SUPPLEMENTARY INFORMATION:**Background and Summary of Final Rule**

The Gramm-Leach-Bliley Act (Pub. L. 106-102, 113 Stat. 1338 (1999)) ("GLB Act") amended the Bank Holding Company Act (12 U.S.C. 1841 *et seq.*) ("BHC Act") to allow a bank holding company that elects to become a FHC (a "FHC") and a foreign banking organization that elects to be treated as a FHC to engage in a broad range of financial activities, including securities underwriting, insurance sales and underwriting, and merchant banking. On January 18, 2000, the Board approved an interim rule implementing these provisions and detailing the procedures that allow a bank holding company and foreign banking organization to qualify for and maintain FHC status (65 FR 3786 (January 25, 2000)). This interim rule also enumerated the capital, management, and Community Reinvestment Act (12 U.S.C. 2901 *et seq.*) ("CRA") requirements that must be satisfied in order to establish and maintain FHC status. On March 15, 2000, the Board amended the management criterion and certain provisions concerning the FHC election process applicable to foreign banking organizations. (65 FR 15053 (March 21, 2000)).

On March 10, 2000, the Board approved an additional interim rule containing a list of the financial activities that are permissible for a FHC to conduct. This interim rule also set forth the procedures a FHC must follow to engage in a financial activity; the process for requesting a Board determination that an additional activity is financial in nature or incidental thereto; and a procedure for requesting the Board's prior approval to engage in an activity that is complementary to a financial activity (65 FR 14433 (March 17, 2000)).

The interim rules on elections and activities both became effective on March 11, 2000, the effective date of the GLB Act, so that qualifying companies immediately could take advantage of the expanded powers granted by the statute. The vast majority of the provisions of the interim rules were included in a

new subpart I of Regulation Y, entitled "Financial Holding Companies."

The Board solicited comment on the interim rules and received a total of 59 public comments on these rules. The commenters included bank holding companies and foreign banking organizations; state bank supervisory officials; trade associations representing the banking, insurance, and securities industries; foreign central banks and governmental officials; law firms; community groups; and individuals.

Many commenters supported the Board's interim rules and commended the Board for issuing the rules swiftly and using an easily comprehensible format. Commenters representing the interests of foreign banking organizations urged the Board to amend the FHC election procedures and requirements applicable to those organizations, including use of the leverage ratio in assessing comparability of capital, while domestic organizations asked the Board to hold foreign banking organizations to the same requirements that apply to U.S. bank holding companies. Commenters also were divided as to whether the Board should retain sections of the interim rules that reserved the Board's supervisory authority to impose restrictions on a bank holding company that met the statutory criteria to become a FHC but about which the Board nonetheless had supervisory concerns. Most comments regarding this section asserted that the Board did not have a statutory basis for imposing a requirement on a company that met the GLB Act's criteria to become a FHC. Several commenters also suggested that the Board should not require bank holding companies to submit supporting information with their FHC elections and that the Board should amend the definition of the term "well managed."

Commenters asked for guidance about the application of various aspects of the rule, including the interplay between Regulation Y and Regulation K with respect to activities conducted abroad by a FHC and the procedures for requesting to become a FHC as part of a section 3 proposal to become a bank holding company. A number of commenters suggested that the Board allow public comment on FHC declarations and condition the effectiveness of a FHC election on compliance with CRA-related requirements not enumerated in the GLB Act.

After carefully reviewing the public comments, the Board has adopted a final rule that largely incorporates the framework contained in the interim rules. The Board has made a number of

revisions in response to the public comments as well as revisions based on the experience of the Federal Reserve System in administering the interim rules since March 11, 2000. The suggestions made by commenters, the Board's responses thereto, and the Board's revisions are discussed in greater detail below.

Explanation of Final Rule

Section 225.81—What Is a FHC?

Consistent with the GLB Act, the interim rules defined a FHC as a bank holding company that meets the following requirements: (1) The company has made an effective election to become a FHC, and (2) all depository institutions controlled by the bank holding company are at the time of election and remain both well managed and well capitalized.¹ One commenter suggested that the Board allow a bank holding company that controls multiple banks to become a FHC if a depository institution representing a small percentage of the company's assets was not well managed. However, the GLB Act explicitly provides that a bank holding company may become a FHC only if each depository institution controlled by the company is well managed, and the Board cannot alter this requirement by regulation. Accordingly, the Board has adopted § 225.81 of the interim rule without amendment.

Definitions of Well Capitalized and Well Managed

As noted above, a bank holding company may become a FHC only if each of its subsidiary depository institutions is both well capitalized and well managed. The final rule, like the interim rule, provides that an *uninsured* depository institution is considered well capitalized if it meets or exceeds the capital ratios that its appropriate Federal banking agency has established under section 38 of the Federal Deposit Insurance Act (12 U.S.C. 1831o) ("FDI Act") for insured depository institutions.²

The final rule also amends and simplifies the existing definition of

"well managed" in Regulation Y so that it can be used both for purposes of determining whether expedited processing of a bank holding company's application is appropriate and for determining whether a bank holding company qualifies to be a FHC. The final rule eliminates the requirement that a depository institution receive at least a satisfactory compliance rating to be deemed well managed, because the compliance criterion applies only to the availability of the expedited application process and not to an organization's status as a FHC. The rule amends the expedited processing procedures to adjust for these changes and to provide that a bank holding company's depository institutions must satisfy a compliance requirement for the bank holding company to qualify for expedited processing.³ This revision does not change in any substantive way the application of the previous well managed criteria.

The FDI Act allows the appropriate Federal banking agency for a depository institution to use an examination conducted by a state banking agency in lieu of a Federal examination, provided the state examination meets the criteria at section 10(d) of the FDI Act (*see* 12 U.S.C. 1820(d)). To reflect this, the final rule allows the Board to rely on examinations conducted by the appropriate state agency where applicable in determining whether an institution is well managed.

Where a depository institution has not yet been examined, the final rule retains the provision of the interim rule that allows the Board to determine that the institution is well managed after reviewing the institution's managerial and other resources and consulting with the appropriate Federal banking agency for the institution. Moreover, the final rule provides that a depository institution resulting from the merger of two or more well managed depository institutions would be considered well managed unless the Board determined otherwise after consulting with the appropriate Federal banking agency. Commenters supported both these provisions.

Commenters requested additional guidance on whether a depository institution would remain well managed if it merged with an institution that was not well managed. In these circumstances, the Board believes that the managerial status of the combined institution likely would depend on the particular facts and circumstances. Accordingly, the final rule provides that

an institution resulting from the merger of a well managed institution with an institution that is not well managed or that has not been examined will be considered well managed if the Board determines, after a review of managerial and other resources and after consulting the appropriate Federal banking agency, that the resulting institution is well managed.

Section 225.82—How Does a Bank Holding Company Elect to Become a FHC?

Section 225.82 sets forth the procedures that a bank holding company must follow to elect to become a FHC and describes when an election will and will not become effective. The rule allows a bank holding company to elect to become a FHC by filing a simple declaration with the appropriate Federal Reserve Bank. The declaration must contain a statement that the bank holding company elects to be a FHC; provide the name and head office addresses of the company and each of the depository institutions it controls; certify that each depository institution controlled by the company is well capitalized as of the date the company submits its declaration; provide the capital ratios as of the close of the previous quarter for each depository institution controlled by the company; and certify that each depository institution controlled by the company is well managed as of the date the company submits its declaration. In light of its experience with declarations under the interim rule, the Board has amended § 225.82 to clarify that a declaration is not deemed complete and the 30-day processing period for the declaration does not commence until the declaration contains all of the information required by § 225.82(b).

Several commenters requested that the Board eliminate the requirement that a declaration include capital ratio information because the Board already has access to capital data about depository institutions. However, the Board has retained this requirement for several reasons. The Board's experience administering the interim rule indicated that the capital data received from bank holding companies at times is different than the capital data otherwise available to the Board, particularly in the weeks immediately following the end of a quarter. In several cases, the capital information provided by a bank holding company was more favorable than the data otherwise available to the Board and thus resulted in an effective FHC election that the Board's data alone would not have supported. Moreover, the Board's experience suggests that

¹ Section 225.81 also sets forth the provisions that apply to a foreign bank that controls a depository institution in the United States, as well as U.S. bank holding companies that control a foreign bank with U.S. operations. These provisions are described in more detail below in the discussion of §§ 225.90 to 225.93.

² The final rule also defines the term "depository institution" at § 225.2(t) using the definition provided at section 2 of the BHC Act as amended by the GLB Act. For purposes of Regulation Y, the term "depository institution" has the same meaning as in section 3(c) of the Federal Deposit Insurance Act (12 U.S.C. 1813(c)).

³ *See* 12 CFR 225.14 and 225.23, as amended by this rule.

requiring a bank holding company to submit the capital data may improve the quality of declarations submitted to the Board because it aids the company in determining whether it can in fact certify that all of its subsidiary depository institutions are well capitalized.

Section 225.82(f) of the final rule provides that a bank holding company's election to become a FHC becomes effective on the 31st day after the date that the declaration was received unless the Board notifies the company prior to that time the election is ineffective. The rule also provides that the Board or the appropriate Federal Reserve Bank affirmatively may notify a company that its election is effective prior to the expiration of the 30-day review period.

CRA Requirement

For a bank holding company's FHC election to be effective, the final rule requires the Board to determine that each insured depository institution controlled by the bank holding company has achieved a rating of at least "satisfactory record of meeting community credit needs" at its most recent examination under the CRA. Consistent with the GLB Act, the final rule also allows the Board, when evaluating the CRA criterion, to exclude an insured depository institution that a bank holding company acquired in the 12 months prior to submitting its FHC declaration. To qualify for this exclusion, the company must submit and the appropriate Federal banking agency for the insured depository institution must accept a plan to restore the institution's CRA rating to a satisfactory level.

Commenters asked for clarification about how the Board in practice would apply the CRA requirement. In particular, commenters requested guidance on whether a bank holding company that controls an institution that has not been examined may make an effective FHC election. The GLB Act states that the Board must find a FHC election to be ineffective if not all of the subsidiary insured depository institutions of the company have achieved at least a satisfactory CRA rating at its "most recent examination." In light of this statutory language, the final rule allows a bank holding company to qualify as a FHC if it controls an institution that has not been examined for CRA compliance and thus has not yet achieved any CRA rating, provided that the company meets all other applicable criteria. As with any other insured depository institution, if an unrated institution does not achieve at least a satisfactory rating at its next

CRA examination, the FHC would be subject to the limitations that apply under § 225.84.

A number of commenters requested the Board, when determining whether the insured depository institutions controlled by a bank holding company have met the CRA requirement, to (1) publish FHC declarations for comment, particularly when the Board excludes a recently acquired institution; (2) take into account additional facts related to the CRA record of a bank holding company and the insured depository institutions it controls; and (3) condition the effectiveness of a FHC election on a company's compliance with various CRA-related criteria not mentioned in the GLB Act.

The GLB Act establishes the requirements that a bank holding company must meet to become a FHC and sets forth a detailed framework that limits the Board's evaluation of the CRA criterion. The GLB Act provides that the Board must find a bank holding company's election to be ineffective only if all of the insured depository institutions controlled by the company, except for an institution that qualifies for the limited exclusion discussed above, have not achieved an overall CRA rating that was at least satisfactory.⁴ The GLB Act specifically ties the CRA requirement to the CRA examination rating of each insured depository institution and neither provides for public comment on FHC elections nor authorizes the Board to condition the effectiveness of an election based on the CRA criterion. The Board therefore believes that incorporating the suggestions mentioned above would be inconsistent with the terms of the GLB Act and, accordingly, has not amended the rule as suggested.

Proposals To Become a Bank Holding Company and a FHC

The final rule allows a company that is not a bank holding company to submit simultaneously an application under section 3(a)(1) of the BHC Act to become a bank holding company and a request to become a FHC on consummation of that transaction. The process applicable to simultaneous filings to become both a bank holding company and a FHC is included in a

⁴ The Board notes that it cannot exclude a recently acquired institution with a poor CRA rating unless the appropriate Federal banking agency for the institution has accepted an affirmative correction plan to restore the institution's CRA rating to at least a satisfactory level. Thus, the company's CRA correction plan for the institution must be reviewed carefully by both the institution's primary Federal regulator and the Board.

new § 225.82(f). The FHC request must (1) state that the company seeks to become a FHC on consummation of its section 3 proposal to become a bank holding company and (2) certify that each depository institution that would be controlled by the company on consummation of the section 3 proposal will be both well capitalized and well managed on the date of consummation.

In order to coordinate action on these two requests, the final rule delays the official acceptance of the FHC declaration to the date the company consummates its section 3 proposal and becomes a lawful bank holding company. The Board generally will find this declaration effective on the date the company becomes a bank holding company through consummation of its section 3 proposal to become a bank holding company. However, the rule provides that a declaration will not be effective if the Board determines that (1) a depository institution that would be controlled by the company on consummation of its section 3 proposal is not both well capitalized and well managed; or (2) any insured depository institution to be controlled by the company on consummation did not achieve at least a satisfactory rating at its most recent CRA examination. The Board may make this determination at any time prior to the date the company becomes a bank holding company. Unless the Board determines otherwise based on the specific facts of the case, a company that becomes a bank holding company by acquiring an insured depository institution with a poor CRA rating cannot attain an effective FHC election until the acquired institution achieves at least a satisfactory CRA rating.

The Board's Ability To Take Supervisory Action

Section 225.82(d) of the interim rule on elections noted that the Board retained authority to take supervisory actions against a bank holding company that had made an effective election to become a FHC. These actions could, for example, include imposing supervisory limits on the activities and acquisitions of a FHC. Although one commenter supported this provision, several commenters asserted that the Board did not have statutory authority to limit the operations of a FHC that met the applicable statutory criteria.

Section 8 of the BHC Act, section 8 of the Federal Deposit Insurance Act, and other applicable statutes long have given the Board supervisory authority to restrict the conduct of bank holding companies where necessary or appropriate to protect the safety and

soundness of depository institutions or otherwise further the purpose of Federal banking laws. Although the GLB Act amended several of these provisions, it did not limit the general applicability of the Board's supervisory power over bank holding companies that become financial holding companies. Therefore, the final rule continues to provide that the Board may take appropriate supervisory action against a FHC if the Board believes that the company does not have the appropriate financial and managerial resources to commence or conduct an activity, make an acquisition, or retain ownership of a company, or the Board believes such action is appropriate to enforce applicable Federal law.

Section 225.83—What Are the Consequences of Failing to Continue To Meet Applicable Capital and Management Requirements?

Under the GLB Act, a FHC is subject to special corrective action requirements if any depository institution controlled by the company ceases to be both well capitalized and well managed. Section 225.83 of the rule implements these provisions.

The Board received comments about a variety of aspects of § 225.83. Several commenters requested that the Board clarify when and under what circumstances a company must provide notice to the Board of a change in the capital or management status of a subsidiary depository institution. Some commenters questioned the Board's authority and decision to require a company that it is subject to a corrective action agreement to obtain the Board's prior approval to engage in an additional activity or acquires shares of any company under section 4(k). Other commenters suggested that a FHC should be allowed to acquire an institution that is less than well managed without thereafter being subject to the prior approval requirement.

After carefully considering these comments and the Board's experience in administering the interim rule, the Board has adopted a final rule that retains the substantive provisions of § 225.83. This final rule contains the following modifications.

First, because a FHC may have access to capital and managerial data on its subsidiaries before the Board does, the final rule requires that a FHC notify the Board within 15 days of becoming aware that any of its subsidiary depository institutions has ceased to be well capitalized or well managed. The Board has amended § 225.83(b) to provide that a company becomes aware

that a subsidiary depository institution is not well capitalized upon the occurrence of any material event that would change the capital category assigned to the institution for purposes of section 38 of the FDI Act (12 U.S.C. 1831o). These are the same events that would trigger a depository institution to provide notice to its appropriate Federal banking agency under the prompt corrective action rules (*see, e.g.*, 12 CFR 208.42(b) and (c)). A company is deemed to become aware that a subsidiary depository institution is no longer well managed at the time the depository institution receives written notice from its appropriate Federal banking agency that either the institution's composite rating or management rating is not at least satisfactory. The final rule also provides that this notice may come from the state banking agency in an examination conducted in accordance with section 10(d) of the FDI Act.

As noted above, the GLB Act specifically authorizes the Board to impose limitations on the conduct or activities of a company that is subject to a corrective action agreement if the Board believes that such limitations are appropriate under the circumstances and consistent with the purposes of the BHC Act. The Board believes it is appropriate and consistent with the purposes of the BHC Act to require a FHC that ceases to meet applicable capital and management standards to obtain the Board's approval prior to conducting any of the activities that are newly authorized for FHCs by the GLB Act. This allows the Board to assure that the FHC is not inappropriately diverting resources from improving the condition of its subsidiary depository institutions. It also recognizes that the new powers and streamlined review process contained in the GLB Act were intended to be available only to companies that maintain strong capital and management at their subsidiary depository institutions. For these reasons, the final rule retains the prior approval requirement for companies subject to a corrective action agreement.

The Board may determine to grant approval to engage in additional activities on a general basis or only on a transaction-by-transaction basis as appropriate, given the circumstances that caused the FHC to fail to meet the well capitalized and well managed requirements. For example, the Board has given general approval to a FHC that controlled only well capitalized and well managed institutions and then acquired a relatively small troubled institution and immediately developed

a plan to improve the condition of the troubled institution.

The final rule retains the requirement that a company that received notice from the Board that one or more of its subsidiary depository institutions is not both well capitalized and well managed execute an agreement with the Board to comply with the capital and management requirements applicable to financial holding companies (a "corrective action agreement"). This corrective action agreement must be executed within 45 days of the company's receipt of the notice or such additional time as the Board may allow if a company requests an extension of time, must explain the actions the company will take to correct all areas of noncompliance and the time frame within which each action will be taken, must provide any other information the Board may require, and must be acceptable to the Board.

If a company subject to a corrective action agreement does not cause all of its subsidiary depository institutions to be well capitalized and well managed within 180 days (or such other time as the Board may permit) of receiving notice of a deficiency from the Board, the Board may order the company to divest ownership or control of any depository institution the company owns or controls. The GLB Act and the final rule state that a company may comply with a Board order to divest by ceasing to engage in any activity that may be conducted only under sections 4(k), 4(n), or 4(o) of the BHC Act.⁵

Section 225.84—What Are the Consequences of Failing To Maintain a Satisfactory or Better Rating Under the Community Reinvestment Act at All Insured Depository Institution Subsidiaries?

The GLB Act requires the Board to prohibit a FHC from engaging in or acquiring control of a company engaged in any new activity under sections 4(k) and 4(n) of the BHC Act if any insured depository institution controlled by the FHC has received a rating of less than "satisfactory record of meeting community credit needs" in its most recent CRA examination. Section 225.84 implements this provision by providing that the statutory prohibitions apply

⁵ The interim rule provided that a company could choose to comply with an order to divest by ceasing to engage in any activity that would not be permissible for a bank holding company under section 4(c)(8) of the BHC Act. The Board has changed the statutory reference in order to clarify that a company that complies with a divestiture order by ceasing to engage in certain activities may continue to engage in any conduct permissible for a bank holding company under section 4(c), not just the conduct permitted by section 4(c)(8).

upon receipt by the FHC of notice that any subsidiary insured depository institution has received a less-than-satisfactory CRA rating.

Section 225.84 provides that a FHC receives notice of a less-than-satisfactory CRA rating when (1) an insured depository institution controlled by the FHC receives written notice from its appropriate Federal banking agency that the institution has received a less-than-satisfactory CRA performance rating at its most recent examination; or (2) the FHC receives written notice from the Board that an insured depository institution it controls has received such a rating. The prohibitions imposed by § 225.84 remain in effect until each insured depository institution controlled by the FHC has received at least a satisfactory CRA rating at its most recent examination.

The Board also has considered the applicability of the CRA provisions to the situation in which a FHC acquires an insured depository institution with a poor CRA rating. The terms of the GLB Act require that the Board apply the prohibitions if "any insured depository institution subsidiary of such FHC * * * has received in its most recent examination under the CRA a rating of less than 'satisfactory record of meeting community credit needs.' " The Board believes that this language is best read to apply only when an insured depository institution receives a less-than-satisfactory CRA rating while it is under the control of the FHC.⁶ A FHC is responsible for the CRA rating of an insured depository institution only if the FHC controlled the institution during the period that the examination occurs. Moreover, it would discourage FHCs with well rated institutions from acquiring and correcting poorly rated institutions if a penalty were imposed on the FHC immediately upon acquiring the poorly rated institution. The Board believes that there are strong public benefits in allowing a bank holding company with a proven CRA performance record at its existing insured depository institutions to acquire a poorly rated insured depository institution.

Accordingly, the final rule retains the provisions of the interim rule that provide that the CRA prohibitions apply to a FHC when an insured depository

institution that is controlled by the FHC receives notice from the appropriate Federal banking agency that the insured depository institution has received a less-than-satisfactory CRA rating. This notice typically will occur, if at all, at the first CRA examination after the poorly rated insured depository institution is acquired by the FHC. If the institution does not achieve at least a satisfactory CRA rating at its first CRA examination following the acquisition, the prohibitions would apply to the FHC. This interpretation is consistent with the provision of the GLB Act that allows the Board when evaluating a FHC election to exclude the poor rating of any institution acquired by the company within the preceding 12 months.

The Board will monitor the FHC's progress in addressing the CRA performance of any recently acquired insured depository institution and reserves the right also to provide notice that the CRA prohibitions apply if the FHC is not taking appropriate action to improve the insured depository institution's CRA performance.

The rule states that a FHC's ability to engage in certain activities is not affected while the prohibitions are in effect. First, consistent with the GLB Act, a FHC that notified the Board it was engaged in merchant banking or insurance company investment activities prior to the time one of its subsidiary insured depository institutions received a less-than-satisfactory CRA rating may continue to make investments in the ordinary course of conducting such investment activities. Second, a FHC may engage in activities and make acquisitions under section 4(c)(8) of the BHC Act, subject to the applicable notice and approval requirements.

Section 225.85—Is Notice To or Approval From the Board Required Prior to Engaging in a Financial Activity?

Section 225.85 of the final rule generally permits a FHC to commence any financial activity or acquire control of a company engaged exclusively in one or more financial activities without the Board's prior approval.⁷ The final rule specifically provides that a FHC may conduct any financial activity either in the United States or abroad,

subject to the laws of the jurisdiction in which the activity is conducted.

Consistent with the GLB Act, § 225.85 of the final rule provides that a FHC must obtain prior Board approval to acquire more than 5 percent of the shares of a savings association. In addition, for the reasons explained above, the rule notes that the Board, in the exercise of its supervisory authority, may require a FHC to obtain prior Board approval to engage in or acquire a company engaged in a financial activity. In each of these cases, the final rule adopts the provisions of the interim rule with only minor, technical revisions.⁸

Section 225.85(a)(3) of the interim rule also allowed a FHC to control or acquire more than 5 percent of the voting shares of a financial company that engaged in limited nonfinancial activities if certain conditions were met, including the condition that the acquired company be substantially engaged in activities that are permissible for a FHC. The Board has revised this provision in several respects in light of its experience administering the interim rule. First, the Board has clarified that the acquired must be substantially engaged in activities that are financial in nature, incidental to a financial activity, or otherwise permissible for a FHC under section 4(c) of the BHC Act.⁹ The final rule provides that a company generally is considered to be "substantially engaged" in permissible activities if at least 85 percent of the company's consolidated total annual gross revenues and 85 percent of the company's consolidated total assets are attributable to the conduct of financial and incidental activities and other activities that are permissible under section 4(c) of the BHC Act.

Although a FHC may acquire any percentage of shares or control of a company engaged in limited impermissible activities, the FHC need only provide a post-transaction notice under § 225.87 if such an acquisition results in control of the company. The final rule continues to require that the FHC conform, terminate, or divest all of

⁶ Moreover, although the GLB Act requires the Board to impose prohibitions on the activities and acquisitions of a FHC if an insured depository institution of the FHC has received a less-than-satisfactory rating at its most recent CRA examination, the statute does not enumerate a specific procedure or time frame within which the Board must implement this requirement.

⁷ The term "financial activities" refers to activities that have been determined to be financial in nature or incidental to a financial activity either by the GLB Act or by the Board in consultation with the Secretary of the Treasury. A list of financial activities is included at § 225.86 of the rule.

⁸ For example, the rule clarifies that a FHC must obtain prior Board approval to acquire control or more than 5 percent of the shares of a company that owns, operates, or controls a savings association.

⁹ Complementary activities are subject to prior approval on a case-by-case basis under section 4(j) of the BHC Act and, therefore, a company engaged in complementary activities generally could not be acquired using the post-transaction notice procedure. Consequently, complementary activities have not been included for the purpose of determining whether a company with mixed activities meets the requirement that it be substantially engaged in permissible activities for FHCs.

the acquired companies impermissible activities within two years of the acquisition. A commitment to terminate impermissible activities is unnecessary, because, under the final rule as written, an acquisition would be unauthorized if the activities of the company are not conformed to Regulation Y within two years of the acquisition.

Section 225.86—What Activities Are Permissible for a FHC?

Section 225.86 of the rule provides a list of the activities that the GLB Act defines as financial in nature and thus permissible for a FHC to conduct directly or indirectly.

Activities Previously Determined To Be Closely Related to Banking

Subsection (a)(1) permits a FHC to conduct any activity that the Board had determined by regulation or order prior to November 12, 1999, to be so closely related to banking as to be a proper incident thereto under section 4(c)(8) of the BHC Act. These activities are listed in § 225.28 of Regulation Y, and the rule incorporates these activities through a cross-reference to that section.

Subsection (a)(2) specifically lists each of the activities the Board approved by order as closely related to banking prior to November 12, 1999, and provides a citation to the most recent or the most comprehensive Board order concerning the activity. These activities are: Providing administrative and other services to mutual funds; owning shares of a securities exchange; providing employment histories to third parties; check cashing and wire transmissions services; providing notary public services, selling postage stamps and postage-paid envelopes; providing vehicle registration services, and selling public transportation tickets and tokens in connection with offering banking services; and real estate title abstracting. The interim rule on activities also authorized financial holding companies to act as a certification authority for digital signatures. The final rule clarifies that this activity includes authenticating the identity of persons conducting financial and nonfinancial transactions abroad, which is consistent with the scope of activities approved by the relevant Board order (*See Bayerische Hypo-und Vereinsbank AG, et al.*, 86 Federal Reserve Bulletin 56 (2000)).

Financial holding companies that engage in any activity pursuant to paragraph (a) must conduct the activity in accordance with the terms and conditions contained in Regulation Y and the Board's orders authorizing the activity, unless such terms and

conditions are modified by the Board.¹⁰ Some commenters requested that the Board amend the rule to include a description of the conditions and limitations governing the conduct of each activity listed in subsection (a). The Board notes that the conditions and limits governing the activities listed in subsection (a) are set forth in § 225.28 of Regulation Y or in the orders referenced in § 225.28(a)(2), and the Board believes that adding a list of conditions and limitations to the rule would lengthen the rule without significantly facilitating compliance with it. Where companies have questions concerning the conditions or limitations applicable to an activity, the company may contact the Board or appropriate Reserve Bank.

Activities Usual in Connection With the Transaction of Banking Abroad

The GLB Act also defined as financial in nature any activity that the Board had determined by regulation in effect on November 11, 1999, to be usual in connection with the transaction of banking or other financial operations abroad (*see* 12 CFR 211.5(d)). Subsection (b) lists the three activities that the Board had determined to be usual in connection with the transaction of banking abroad that are not otherwise defined as financial in nature by other provisions of the GLB Act. These activities are management consulting (beyond that which is allowed under § 225.28 and incorporated by reference at section 225.86(a)(1)); operating a travel agency in connection with the offering of financial services; and organizing and sponsoring a mutual fund.¹¹ These activities must be conducted in accordance with the

limitations set forth in Regulation K regarding the scope and conduct of the activity.¹²

The GLB Act authorizes financial holding companies to conduct the activities listed at § 211.5(d) of Regulation K that, prior to the GLB Act, a bank holding company could conduct abroad. One commenter stated that the activity list at § 225.86(b) should include "commercial and other banking activities," which is the activity described at § 211.5(d)(1) of Regulation K. As a general matter, the GLB Act was intended to expand the range of nonbanking activities that a FHC could conduct and was not meant to affect the provisions of the BHC Act relating to the conduct of banking activities. Specifically, the GLB did not amend the prior approval requirement at section 3 of the BHC Act that governs the acquisition by a bank holding company, including a FHC, of a domestic bank. The Board therefore believes that the GLB Act did not authorize a FHC to conduct commercial and other banking activities in the United States by using the post-transaction notice procedure. In addition, the Board believes that a FHC's acquisition of a foreign bank should continue to be subject to the procedures set forth in Regulation K in order to ensure that the Board fulfills its responsibilities as home country supervisor in relation to international expansion of U.S. banking organizations, consistent with the standards established by the Basel Committee on Banking Supervision (Basel Committee). Accordingly, the Board has not included commercial and other banking activities on the activities list at § 225.86 that may be conducted by using the post-transaction notice procedure.

Other Activities Defined as Financial in Nature by the GLB Act

In addition to authorizing activities that the Board previously has authorized a bank holding company to conduct, the GLB defines several other activities as financial in nature. These activities, which are listed at sections 4(k)(4)(A)–(E), (H), and (I) of the BHC Act, include acting as principal, agent or broker in the sale of insurance products (including annuities and reinsurance products); underwriting, dealing in, and making a market in securities without any limitation on revenues that can be derived from bank ineligible securities; and merchant banking an insurance

¹⁰ The Board by order has authorized bank holding companies under section 4(c)(8) to underwrite and deal in bank-ineligible securities provided that the company does not derive more than 25 percent of its revenues from such activities. *See J.P. Morgan & Co., Incorporated*, 75 Federal Reserve Bulletin 192 (1989). The list in subsection (a)(2) does not include underwriting and dealing in bank-ineligible securities, however, because financial holding companies may conduct these activities under section 4(k)(4)(E) of the BHC Act without regard to the 25-percent revenue limit. Some commenters requested that the Board also remove the 25-percent revenue limit applicable to the conduct of securities underwriting and dealing activities by bank holding companies under section 4(c)(8) of the BHC Act. In the GLB Act, Congress authorized only those bank holding companies that meet the capital, management and CRA standards applicable to financial holding companies to engage in expanded securities activities. The Board does not believe at this time that it would be appropriate to allow bank holding companies that do not meet these standards to engage in expanded securities activities.

¹¹ Section 4(k)(4)(G) and the rule do not authorize a FHC to engage in activities that the Board authorized a bank holding company to provide in individual orders issued under section 4(c)(13) of the BHC Act.

¹² As discussed more thoroughly below, the notice procedures in Regulation K do not apply to activities that are conducted under section 4(k)(4) of the BHC Act and Regulation Y.

company investment activities. Subsection 225.86(c) provides that a FHC may engage in any activity set forth in the above-referenced sections of the BHC Act. These activities must be conducted in accordance with applicable restrictions and limitations contained in the GLB Act and any implementing regulations or supervisory guidance adopted by the Board.¹³

Several commenters on the interim rule requested that the Board amend section 225.86 to eliminate cross references to the GLB Act and other sections of Regulation Y and to provide a complete description of each activity permissible for a FHC, including the conditions and limitations applicable to that activity. The Board believes the activities incorporated in the rule by reference are easily located elsewhere in the Board's Regulation Y and the BHC Act, and that including the requested provisions in the rule would lengthen the rule without adding a commensurate level of convenience. Accordingly, the Board has not included the requested provisions in the final rule. The Board has, however, prepared a single list of all activities permitted under section 225.86 that may be obtained from the Reserve Banks.

The GLB Act directs the Board, by regulation or order, to define the extent to which three activities listed in section 4(k)(5) are financial in nature or incidental to a financial activity. The Board anticipates proposing a rule to implement section 4(k)(5) in the near future.

The GLB Act also permits the Board, in consultation with the Secretary of the Treasury, to determine that additional activities not listed in section 225.86 are financial in nature of incidental thereto. In this regard, the Board recently determined by rule that acting as a finder is an activity that is incidental to a financial activity (*see* 65 FR 80735 (December 22, 2000)). The Board also has requested comment on a proposal to allow FHCs, as an activity that is complementary to a financial activity, to invest in companies engaged in certain data processing and Internet-related activities (*see* 65 FR 80384 (December 21, 2000)).

Interplay Between § 225.86 and Other Authorities

Although the Board is not listing each limitation and condition that applies to

the activities described at § 225.86, the Board believes that some general guidance on the how the limitations apply is warranted in light of a number of public comments and informal inquiries received by Board staff on this subject. As the Board previously has indicated in connection with issuing the interim rules, the various sections that authorize activities for bank holding companies and financial holding companies, most notably sections 4(c)(8), 4(c)(13), and 4(k), remain separate sources of authority under which a FHC may engage in various activities. If an activity is listed in more than one provision of section 4, the FHC may choose to conduct the activity under any applicable provision, subject only to the procedures and limitations that the chosen source of authority imposes on the activity.

For example, a FHC that wishes to engage in securities underwriting could choose to conduct that activity under section 4(c)(8). If it chose that source of authority, the FHC would be required to obtain prior Board approval under subpart C of Regulation Y and would be required to conduct the underwriting activity subject to the revenue restrictions and other limitations applicable to securities underwriting activities conducted under section 4(c)(8). Alternatively, a FHC could engage in securities underwriting under section 4(k)(4)(E), in which case only a post-transaction notice would be required and the limitations of section 4(c)(8) would not apply to the activity.

As discussed above, the final rule states that a FHC may conduct any activity listed at § 225.86 either in the United States or abroad using the post-transaction notice procedure.¹⁴ As with the conduct of financial activities in the United States, the limitations that apply to an activity conducted abroad by a

FHC depend on the legal authority under which the FHC conducts the activity. If the FHC conducts an activity abroad under section 4(c)(13) of the BHC Act as implemented by § 211.5(d) of Regulation K, all the requirements and investment limitations described in § 211.5 would apply. If, however, a FHC conducts an activity listed at 4(c)(13) abroad using section 4(k)(4)(G) of the BHC Act, which incorporates by reference the activities authorized by the Board under section 4(c)(13), the Regulation K general consent procedures and investment limitations do not apply.

Section 225.87—Is Notice to the Board Required After Engaging in a Financial Activity?

Section 225.87(a) of the final rule describes when a FHC must provide notice to the Board after commencing or acquiring a company engaged in a permissible financial activity. As a general matter, the final rule states that a FHC may engage in any activity listed in § 225.86 by providing the appropriate Reserve Bank with a notice within 30 days of commencing the activity or acquiring control of a company engaged in the activity. The interim rule provided that this notice could take the form of a letter that contained information about the activity commenced and the company that conducts it. In response to public comments and to ensure that the post-transaction notices contain the basic information necessary for the Board to monitor a FHC's activities, the Board has designated forms that domestic and foreign financial holding companies must use to satisfy the post-transaction notice requirement.¹⁵ The authorized form requires limited information about the activity commenced or the company acquired, as well as information about the location of the company conducting the activity and its status within the FHC's organization structure. The appropriate form for submitting the post-transaction notice may be obtained from any Federal Reserve Bank or from the Board.

Section 225.87(b) of the final rule outlines the exceptions under which post-transaction notice is not required to engage in an activity or make an acquisition. Consistent with the GLB Act, no notice is required in connection with the acquisition of shares of a company if the FHC would not control

¹³ For example, the Board, in conjunction with the Secretary of the Treasury, adopted and requested public comment on an interim rule implementing the merchant banking investment provisions of the GLB Act. *See* 65 FR 16460 (March 28, 2000).

¹⁴ The GLB Act states that a FHC may conduct in the United States those activities previously authorized by the Board at § 211.5(d) of Regulation K (emphasis added). The Board has received several inquiries as to whether a FHC also may conduct these activities outside the United States using the post-transaction notice. The GLB Act generally intended to authorize FHCs to conduct all of the activities it defined as financial in nature in the United and abroad using the streamlined procedure. Moreover, all but the three Regulation K activities listed separately at § 225.86(b) have been authorized in the same form under Regulation Y. The preexisting Regulation Y activities authorized for FHCs do not have the "in the United States" reference and may be conducted abroad using the streamlined procedure. The Board has determined, as reflected in this final rule, that no regulatory purpose would be served by requiring a FHC to follow the more restrictive Regulation K procedures to conduct the remaining three listed activities abroad. An FHC therefore may conduct all activities listed at § 225.86 either in the United States or abroad using the post-transaction notice procedure.

¹⁵ Domestic financial holding companies should use the FR Y-6A, which soon will be replaced by the FR Y-10, and foreign banking organizations should use the FR Y-7A, which soon will be replaced by the FR Y-10F.

the company after the acquisition. The final rule retains this provision.

The rule also provides that a FHC that properly has notified the appropriate Federal Reserve Bank that the FHC is engaged in securities underwriting and dealing, merchant banking, or insurance company investment activities generally is not required to provide an additional post-transaction notice when the FHC makes particular investments in the ordinary course of conducting those activities. Notwithstanding this exception for individual investments, investments in more than 5 percent of the shares, assets, or other ownership interests of a company that have a cost that exceeds the lesser of 5 percent of the FHC's Tier I capital or \$200 million must be reported under § 225.87. In response to comments that the provisions of the interim rule on activities related to merchant banking investments were difficult to understand, the Board has restructured those provisions to explain more succinctly when notice is and is not required for individual merchant banking investments.

The final rule also adds a new exception at § 225.87(b)(2) to the general post-transaction notice requirement. This new section provides that a FHC that has submitted a post-transaction notice in connection with a particular financial activity is not required to submit an additional notice under this section to commence the activity *de novo* through any other authorized subsidiary of the FHC without providing additional notice under § 225.87(a).¹⁶ This exception applies only if the FHC already controls the company through which the activity will be commenced, and, thus, the acquisition by a FHC of control of a company engaged in a listed activity does not qualify for this exception. In addition, this new exception is not available if the Board, in the exercise of its supervisory authority, informs the FHC that notice is required for the commencement *de novo* of a financial activity.

Section 225.88—How To Request the Board To Determine That an Activity Is Financial in Nature or Incidental to a Financial Activity?

Under the GLB Act, the Board, in consultation with the Secretary of the

Treasury, may expand the list of activities that are permissible for a FHC by determining that an additional activity is financial in nature or incidental to a financial activity. Section 225.88 permits a FHC or other interested party to request such a determination.

The rule provides that a request for a determination that an activity is financial in nature or incidental to a financial activity must identify and define the activity for which a determination is sought, explain in detail why the activity should be considered financial in nature or incidental, and provide information supporting the requested determination and any other information requested by the Board. The rule requires the Board to provide the Secretary of the Treasury a copy of the request and consult with the Secretary in accordance with section 4(k)(4)(2) of the BHC Act. The rule also allows the Board, after consultation with the Secretary, to publish a description of the proposal in the **Federal Register** with a request for public comment. The Board will attempt to make a final decision on a request filed under § 225.88 within 60 days of completion of both the consultative process and the public comment period, if any.

Like the interim rule, § 225.88 of the final rule also allows a FHC to request an advisory opinion from the Board regarding the scope an activity already determined to be financial and listed in § 225.86. Such a request must be in writing and provide a detailed description of the activity, product, or service about which the company is inquiring, an explanation supporting an interpretation regarding the scope of the permissible financial activity, and any other information required by the Board. The Board will respond to a requester within 45 days of receiving a complete written request.

Several commenters suggested that the Board, without waiting for a specific request, evaluate whether an activity is financial in nature or incidental to a financial activity if another Federal banking agency has authorized or authorizes depository institutions under its supervision to conduct the activity. The GLB Act allows the Board at its own initiative to propose authorizing an additional activity. In this regard, the Board anticipates monitoring developments in the banking and financial services industries in order to identify new activities that might be considered financial in nature or incidental thereto. However, the Board does not believe it is appropriate to propose as financial in nature or incidental all activities that another

Federal banking agency may have authorized. The standards the Board must consider when authorizing a financial activity under the GLB Act may differ from the standards governing the authorization of new activities under other Federal banking laws. In light of these differences, the requirement that the Board consult with the Secretary of the Treasury in connection with financial activities, and the potential impact of new activities on the depository institution subsidiaries of financial holding companies, the Board believes that it is important to evaluate each activity authorized by another Federal banking agency on a case-by-case basis before proposing that the financial holding companies be allowed to conduct the activity.

Section 225.89—How To Request Approval To Engage in an Activity That Is Complementary to a Financial Activity?

The Board has adopted without amendment § 225.89 as originally proposed. This section includes a procedure for a FHC to obtain the Board's prior approval to engage in activity that the company believes is complementary to a financial activity in which the company is engaged. Generally, such a request must identify the proposed complementary activity and specifically discuss how it would be conducted; identify the financial activity for which the proposed activity would be complementary and provide information to support why the proposed activity should be considered complementary to the identified financial activity; describe the scope and relative size of the proposed activity; discuss the risks that conducting the activity reasonably may be expected to pose to the safety and soundness of the company's subsidiary depository institutions and the financial system generally; describe the potential adverse effects and potential public benefits that could result from conducting the activity; and provide any additional information requested by the Board.

In acting on a proposal to engage in a complementary activity, the Board will consider whether the activity is complementary to the identified financial activity, whether the proposed activity would pose a substantial risk to the safety or soundness of depository institutions or the financial system generally, and whether the proposal could be expected to produce benefits to the public that outweigh possible adverse effects. The Board will act on a request for prior approval to engage in a complementary activity within the

¹⁶ One commenter stated that a FHC should be allowed to commence the same financial activity in different subsidiaries using different sources of authority. As discussed above, some activities are authorized by more than one source of authority. A FHC therefore may commence the same activity in different subsidiaries using different sources of authority in accordance with the procedures applicable to the chosen authority.

time period described at section 4(j) of the BHC Act.

Section 225.90—What Are the Requirements for a Foreign Bank To Be Treated as a Financial Holding Company?

A foreign bank that is a bank holding company because it owns a subsidiary bank in the United States must comply with the same requirements as any other bank holding company that elects to be a financial holding company under the GLB Act. Most foreign banks, however, do not own subsidiary banks in the United States; instead, they operate U.S. branches that are part of the foreign bank itself.¹⁷ Such foreign banks may, like U.S. bank holding companies, also elect to be treated as financial holding companies and thereby be able to engage in the new financial activities. For purposes of a foreign bank with a U.S. branch qualifying to be treated as a FHC, the Act requires the Board to apply capital and management standards to the foreign bank that are comparable to the standards applied to a U.S. bank owned by a FHC, giving due regard to the principle of national treatment and equality of competitive opportunity.

Well Capitalized Standards

Under the interim rule, a foreign bank with a U.S. branch could be considered well capitalized if either: (i) Its home country supervisor had adopted capital standards consistent with the Basel Capital Accord, the foreign bank maintained capital ratios generally equivalent to those required for a well capitalized U.S. bank (Tier 1 capital to total risk-based assets ratio of 6 percent and total capital to total risk-based assets ratio of 10 percent and a Tier 1 capital to total assets leverage ratio of at least 3 percent), and the Board determined that the foreign bank's capital was comparable to the capital required for a well capitalized U.S. bank; or (ii) the foreign bank had obtained a determination from the Board under § 225.91(c) that the bank's capital is otherwise comparable to the capital required of a well capitalized U.S. bank (the "pre-clearance process").

Most commenters criticized the use of a leverage ratio in assessing the capital of foreign banks. Some of the arguments made against imposing a leverage ratio on foreign banks were that: (i) It is

contrary to the internationally accepted Basel Capital Accord and counterproductive to the work of the Basel Committee on Banking Supervision (the "Basel Committee"); (ii) the imposition of a leverage ratio on foreign banks is inequitable due to the different composition of their balance sheets and the amount of nonbanking assets commonly held by foreign banks; and (iii) a leverage ratio requirement would require foreign banks to manage their worldwide capital accounts to meet a specific U.S. requirement, which is contrary to the principle of comprehensive consolidated home country supervision. One foreign bank supervisory authority, however, stated that it did not agree that the Basel Capital Accord was the only possible capital adequacy measure for a national regulator and could see how a Tier 1 leverage test could supplement the Basel Capital Accord in a meaningful way. Some domestic commenters expressed support for the imposition of a leverage ratio requirement on foreign bank FHCs. One commenter stated that requiring foreign banks to meet a leverage ratio of only 3 percent favors foreign institutions contrary to the provisions of the GLB Act and that, to ensure consistency, the lower capital requirement should be available to foreign banks only if they can demonstrate in their declaration and certification that they have implemented the market risk guidelines.

As the Board has previously noted, the numerical screening levels for capital are not the only determining factors in whether a foreign bank may be considered comparably capitalized. The pre-clearance process established by the interim rule allows a foreign bank that does not meet one or more of the screening levels to request a determination that it is nevertheless comparably well capitalized. Consequently, meeting the leverage ratio set out in the regulation has not been a prerequisite for FHC status, and a number of foreign banks have been found to meet FHC requirements despite not having met the leverage screening level.

The foreign bank FHC elections processed to date indicate that the application of a leverage ratio screen to non-U.S. banks may have limited value as a general rule in the assessment of comparability for FHC purposes because of the significant differences between U.S. and foreign banking balance sheets. The home country supervisors of most foreign banks do not require a bank to meet or manage toward any specific leverage ratio and generally do not take it into account in the consolidated

supervision of the bank. In light of the comments received and the Board's experience to date in assessing foreign bank capital in FHC cases, the Board has determined to make several changes in the final regulation. The leverage ratio has been removed from the screening test in the definition of well capitalized in § 225.90(b)(1)(iii) in the final rule. The screening test will now reference a foreign bank's Tier 1 and total risk-based capital levels calculated under the Basel Accord. Accordingly, foreign banks from countries that follow Basel capital rules may submit declarations to be treated as FHCs without reference to any particular leverage ratio. For those countries that do not follow the Basel Accord, capital will continue to be assessed in the pre-clearance process.

The Board also believes, however, review of a non-U.S. bank's leverage ratio in particular cases may serve as an indicator that the bank's capital should receive further scrutiny in determining whether the bank has capital comparable to a well capitalized U.S. bank. Consequently, a foreign bank's leverage ratio will be considered by the Board as one of the factors that can be taken into account for purposes of the comparability review under § 225.92(e) and has been added to the list of factors in that section. Under this approach, the Board may consider whether the level of a foreign bank's leverage ratio is such that it indicates that additional analysis should be undertaken in assessing comparability.¹⁸ Such assessments would in all cases be based on all relevant factors, and not merely on the leverage ratio. Thus, the Board would retain any benefits associated with reviewing the leverage ratio, but the foreign bank's qualification for FHC status would not be dependent upon it. Instead, qualification would depend on the overall capital strength of the foreign bank.

The Board intends that such reviews would be carried out within the 31-day processing period in cases where a certification has been filed and as expeditiously as possible in other cases. The Board also expects that staff would consult with the foreign bank's home country supervisor on issues relating to capital.

Well Managed Standards

Under the interim rule, a foreign bank was considered well managed if: (i) Each of the foreign bank's U.S. offices had received at least a satisfactory

¹⁷ A foreign bank that operates a branch, agency, or commercial lending company subsidiary in the United States is subject to the BHC Act as if it were a bank holding company. In this portion of the preamble, the term "branch" is used to include all three of these forms of operation unless otherwise noted.

¹⁸ The financial information necessary for System staff to compute a foreign bank's leverage ratio will be required as part of the certification process and ongoing reporting required of foreign FHCs.

composite rating at its most recent assessment; (ii) the foreign bank's home country supervisor considered the overall operations of the foreign bank to be satisfactory or better; and (iii) the management of the foreign bank met standards comparable to those required of a well managed U.S. bank.

Several commenters criticized the interim rule's requirement that each individual U.S. office of a foreign bank must have received at least a satisfactory composite rating at its most recent assessment in order for the foreign bank to certify that it is well managed. Some commenters argued that branches and agencies are not properly equated to domestic bank subsidiaries because many are small offices that do not function as independent financial institutions, but rather as marketing or relationship outposts of large, centralized regional headquarters. In addition, some commenters argued that a problem in one such office that can affect the rating of that office may, in fact, have an insignificant impact on the FBO's consolidated banking operations in the United States. Moreover, some commenters have noted that a U.S. bank may have a single branch in less than satisfactory condition and still be given a satisfactory rating overall.

In the final rule, the Board has revised this provision to require that each foreign bank be evaluated on the basis of a composite rating of all of its direct U.S. banking offices, while continuing to evaluate each U.S. depository institution subsidiary of the foreign bank separately. Although the Federal Reserve has traditionally tracked each branch or agency of a foreign bank as a separate entity, in order to make a comparison between U.S. and foreign banks for purposes of the FHC election, the Board has determined that each foreign bank should be evaluated for FHC purposes on the basis of a consolidated rating of all of its direct U.S. banking operations. Thus, in order to achieve comparable treatment, the well managed standard applicable to foreign bank FHCs has been revised in the final rule to require that a foreign bank have a satisfactory rating for its U.S. branches, agencies, and commercial lending company subsidiaries on a composite basis.

The Federal Reserve's foreign bank examination process has been amended to include assignment of a combined assessment of a foreign banking organization's U.S. branch, agency, and commercial lending company operations through the regular

examination cycle.¹⁹ Until this amendment is applied throughout the regular examination cycle, such combined U.S. banking assessments will be determined by the Board on a case by case basis based on the most recent individual office ratings. If a foreign bank that wishes to obtain FHC status has not been assigned a combined U.S. banking assessment as part of the regular examination cycle, the foreign bank should contact its responsible Federal Reserve Bank or utilize the pre-clearance process. A combined U.S. banking assessment may be assigned to a foreign bank as part of the FHC pre-clearance process. If a foreign banking group contains more than one foreign bank with U.S. banking offices, each such foreign bank in the group must have a satisfactory combined U.S. banking assessment in order for the foreign banking group or any of its subsidiaries to obtain FHC status.²⁰

Several commenters also criticized the interim rule's requirement that the foreign bank's home country supervisor consider the overall operations of the foreign bank to be satisfactory or better. Commenters claimed that this requirement was vague, provided very little guidance to the home country supervisors, and would result in unwarranted delays and expense in FHC processing. Some commenters also claimed that this requirement was an extra-territorial expansion of the Board's jurisdiction and the Board, as a host country supervisor, should not require a foreign bank to satisfy a U.S. management standard in its operations outside the United States. Some commenters also incorrectly interpreted this provision as requiring a foreign bank's home country supervisors to evaluate the bank's global management according to the U.S. regulatory definition of "satisfactory."

The final rule amends this requirement to clarify that a foreign bank's home country supervisor must confirm that it consents to the proposed

expansion of the foreign bank's U.S. operations. This formulation is based on guidelines issued by the Basel Committee. The Basel Committee has recognized the need for host country supervisors to seek the views of the home country supervisor prior to issuing a license to a foreign bank for new business in the host country. In its Core Principles for Effective Banking Supervision, the Basel Committee indicates that a key component of consolidated supervision is establishing contact and information exchange with the various other supervisors involved and that this contact "should commence at the authorisation stage when the host supervisor should seek the approval from the home supervisor before issuing a license."²¹ Moreover, the Basel Committee has indicated that a host country supervisor should consent to expansion of a foreign banking organization's activities within its jurisdiction only after the home country supervisor has given its consent to the expansion.²² The final rule's requirement that the home country supervisor consent to the foreign bank's expansion of its U.S. operations under the GLB Act is well within the parameters of these guidelines. In accordance with Basel Committee guidelines, the home country supervisor should consider the foreign banking organization's consolidated capital and management before providing its consent to the expansion. In those situations in which there is no formal consent process in the home country, the Board will consult with the home country supervisor to assure itself that the supervisor considers the capital and management of the bank to satisfy its home country standards and that the supervisor has no objections to the expansion.

²¹ The Core Principles also indicate that the home country supervisor's responsibility extends to a bank's foreign subsidiaries as well as its branches, and supervisors should determine that a bank has the expertise needed to conduct its foreign activities, which may be fundamentally different from the bank's domestic operations, in a safe and sound manner. Basel Committee on Banking Supervision, "Core Principles for Effective Banking Supervision" pp. 40-41 (1997).

²² Basel Committee on Banking Supervision, "Minimum Standards for the Supervision of International Banking Groups and Their Cross-Border Establishments" § II.2 (1992). In reviewing proposals for inward and outward expansion, the Basel Committee states that host country and home country authorities should, at a minimum, give weight to (a) the strength of the bank's and banking group's capital and (b) the appropriateness of the bank's and banking group's organization and operating procedures for the effective management of risks on a local and consolidated basis respectively.

¹⁹ See SR Letter No. 00-14 (SUP) (Oct. 23, 2000). The "combined ROCA rating" encompasses a foreign bank's U.S. branches, agencies, and commercial lending companies, but not its U.S. nonbanking subsidiaries. The combined ROCA rating will be factored into the foreign banking organization's overall Combined U.S. Operations Rating, which will continue to be a single composite rating that reflects the U.S. supervisors' collective assessment of all operations (*i.e.*, banking and nonbanking) of the foreign banking organization in the United States.

²⁰ Each U.S. depository institution subsidiary of a foreign bank would continue to be required to meet the well capitalized and well managed standards on an individual basis for the foreign bank or company to obtain FHC status in the same manner as required for U.S. bank holding companies.

Comparability of Capital and Management

In order for a foreign bank to qualify as a FHC under the interim rule, the Board must make affirmative findings that the foreign bank's capital and management are comparable to that required for a U.S. bank owned by a FHC. The interim rule lists discretionary factors that the Board may take into account in making this determination, such as the composition of capital, accounting standards, long-term debt ratings, reliance on government support to meet capital requirements, and the extent to which the foreign bank is subject to comprehensive consolidated supervision by its home country supervisor.

Some commenters objected to the inclusion of a Board comparability determination in the definitions of well capitalized and well managed, claiming that it is too vague and provides too much discretion to the Board. They also argue that the range of factors that can be taken into account in the comparability analysis and the required consultation with home country supervisors will significantly increase the likelihood that the 31-day processing period will be extended in the case of foreign banks. Some commenters argue that the final rule should not retain the Board's right to reject foreign banks' FHC elections if they fulfill the required capital ratios as calculated under the home country standard that is consistent with the Basel Capital Accord.

The final rule essentially retains the provisions contained in the interim rule that relate to the factors the Board may consider in making a comparability finding. The Board does not believe that these factors are either vague or overbroad. Rather, they are factors that allow a decision on comparability of capital and management to be made. All U.S. banks are subject to essentially the same regulatory framework, which includes frequent examinations and extensive quarterly reporting. Foreign banks, on the other hand, operate under supervisory and accounting systems that can differ significantly from U.S. systems and do not (and should not) report to U.S. authorities as extensively as U.S. banks. Under these circumstances, it is reasonable for the Board to retain the ability to evaluate these differences in deciding whether a foreign bank's capital and management meet the requirements of the FHC regulations.

One commenter specifically questioned whether the Board should take into account a foreign bank's

reliance on government support to meet capital requirements in determining whether the foreign bank is well capitalized. The commenter argued that the Basel Capital Accord does not consider this factor in determining capital adequacy. The final rule retains this factor in the list of factors for determinations of capital and management comparability. In order to assure equality of competitive opportunity with U.S. banking organizations, the Board must be able to consider the impact of any assistance a foreign banking organization receives from its home country for purposes of meeting capital requirements.

Comprehensive Consolidated Supervision

The interim rule included the "extent to which" a foreign bank is subject to comprehensive supervision on a consolidated basis by its home country supervisor in the list of factors the Board may take into account in determining whether a foreign bank is well capitalized and well managed. The interim rule also stated that a foreign bank chartered in a country where no other bank from that country has been reviewed by the Board for comprehensive consolidated supervision under the BHC Act or the International Banking Act is encouraged to use the pre-clearance process.

In the preamble to the January 19, 2000, interim rule, the Board stated that it expects that most foreign banks that elect to be treated as financial holding companies will be subject to comprehensive consolidated supervision, and that an election by a foreign bank that is not subject to comprehensive consolidated supervision will receive a more detailed review. The preamble to the Board's March 15, 2000, amendments to the interim rule specifically requested public comment on whether a foreign bank should be required to be subject to comprehensive consolidated supervision in order to obtain FHC status.

Two commenters addressed whether the final rule should include a comprehensive consolidated supervision requirement for foreign banks to obtain FHC status. One commenter argued that a foreign bank's eligibility to be treated as a FHC should not be conditioned on a comprehensive consolidated supervision standard. The commenter recognized, however, that it may be appropriate for the Board, when warranted by the circumstances of a particular case, to take into account the extent to which a foreign bank with a U.S. branch or agency is subject to

comprehensive consolidated supervision as a factor that is relevant to its determination of whether the bank is well capitalized and well managed for purposes of the GLB Act. Another commenter encouraged the Board to require foreign banks to meet a comprehensive consolidated supervision standard, or follow the pre-clearance process, as a means of insuring that the foreign banks meet standards comparable to those required of U.S. banks.

The Board believes that, as a general rule, the top tier foreign bank in a foreign banking group should be subject to comprehensive consolidated supervision by its home country supervisor in order for the foreign banking group to obtain FHC status.²³ The fact that a foreign bank is subject to comprehensive consolidated supervision provides a host country supervisor, such as the Board for foreign FHCs, with a higher level of confidence that the capital and management information being submitted by the applicant is accurate and reliable.²⁴ Accordingly, the final rule adopts the position that, as a general matter, a foreign bank may not be considered to be well capitalized and well managed if the foreign bank is not subject to comprehensive consolidated supervision. The pre-clearance provision has been amended to clarify that a foreign bank that has not been determined to be subject to comprehensive consolidated supervision by the Board, and is chartered in a country where no other bank from that country has been determined by the Board to be subject to comprehensive consolidated supervision, is required (not merely encouraged) to use the pre-clearance process, even if it otherwise meets the objective screening criteria. The Board may review the home country supervision of a foreign bank through the pre-clearance process and make a

²³ Assuming that a top tier foreign bank in a foreign banking group is determined to be subject to comprehensive consolidated supervision, subsidiary foreign banks of the group should be incorporated into the supervisory framework of the home country supervisor of the top tier foreign bank and, thus, should be subject to comprehensive consolidated supervision even if the subsidiary foreign bank is not subject to comprehensive consolidated supervision by its own home country supervisor.

²⁴ The Basel Committee has stated that, as part of comprehensive consolidated supervision, a bank's home country supervisor should confirm to its own satisfaction the reliability of the consolidated financial and prudential information supplied by the bank on its global operations. Basel Committee on Banking Supervision, "Minimum Standards for the Supervision of International Banking Groups and Their Cross-Border Establishments" § II(1) (1992).

comprehensive consolidated supervision determination in that context. If the Board makes an affirmative comprehensive consolidated supervision determination through the FHC pre-clearance process, the determination will be relied upon for the foreign bank to establish additional branches and agencies under the Foreign Bank Supervision Enhancement Act.

The Board also believes, however, that there may be limited situations in which an exceptionally strong bank from a country that has not yet fully implemented comprehensive consolidated supervision should be able to be considered for FHC status. Accordingly, the regulation has been revised to allow a foreign bank that cannot be determined to be subject fully to comprehensive consolidated supervision to qualify for FHC status if certain factors are present. Such factors are: (i) That the home country supervisor has made significant progress in adopting and implementing arrangements for the consolidated supervision of its banks; and (ii) the foreign bank itself demonstrates significant financial strength, such as through high levels of capital or exceptional asset quality. A foreign bank that is not subject to comprehensive consolidated supervision may use the pre-clearance process to explain to the Board why it should be granted FHC status even in the absence of the supporting comprehensive consolidated supervision framework. The Board, however, anticipates granting FHC status to foreign banks that are not subject to comprehensive consolidated supervision only in rare instances.

Section 225.91—How May a Foreign Bank Elect To Be Treated as a Financial Holding Company?

Section 225.91 sets out the procedures to be followed by a foreign bank that operates a U.S. branch, or a company that owns or controls such a foreign bank in order to elect to be treated as a FHC. In order to be treated as a FHC, a foreign bank must file a written declaration with the appropriate Federal Reserve Bank. Generally, the declaration must: (i) State that the foreign bank or company elects to be treated as a FHC; (ii) provide the appropriate capital information on the foreign bank, any foreign bank that maintains a U.S. branch and is controlled by the foreign bank or company certificant, and any U.S. depository institution subsidiary of the foreign bank or company certificant; (iii) certify that the foreign bank, any foreign bank that maintains a U.S. branch and is controlled by the foreign

bank or company certificant, and all U.S. depository institutions controlled by the foreign bank or company certificant are well capitalized and well managed as of the date the foreign bank or company files its election. This provision also provides for a pre-clearance process whereby a foreign bank or company may request a review of its qualifications to be treated as a FHC for the purposes of making the required certifications in the declaration prior to submitting its declaration.

The interim rule required that all foreign banks with direct U.S. operations that are controlled by a foreign bank or company seeking FHC status be well capitalized and well managed in order for the foreign banking group to be treated as a FHC. Commenters raised two distinct issues regarding this requirement. As an initial issue, some commenters suggested that a foreign bank with a U.S. branch that is controlled by another foreign bank should not be required to meet the well capitalized and well managed standards if the controlling foreign bank does not intend for the subsidiary foreign bank to exercise any of the expanded powers authorized by the GLB Act. One commenter stated that, if a foreign bank FHC has a subsidiary foreign bank, but the subsidiary foreign bank does not intend to engage in the expanded FHC activities in the United States, the GLB Act does not require that the subsidiary foreign bank be made subject to the capital and management standards. The commenter suggested that the Board should assess the capital and management of the controlling foreign bank both separately and on a consolidated basis after taking account of the subsidiary foreign bank, but should not apply the well capitalized and well managed standards separately to such subsidiary foreign bank.

The final rule retains the requirement that each foreign bank that maintains a U.S. branch and is controlled by a foreign bank or company electing to be treated as a FHC must meet capital and management standards comparable to those required of U.S. banks owned by FHCs. Under the GLB Act, all of the depository institution subsidiaries of a bank holding company must be well capitalized and well managed in order for the bank holding company to qualify for FHC status, regardless of where in the corporate structure the expanded activities are to be located. Permitting a foreign bank to evade a similar requirement merely by placing the expanded activities in a particular location in its organization could provide foreign banks with a competitive advantage over U.S. bank

holding companies. If a foreign bank competes directly against U.S. banks in the U.S. banking market, the Board believes it should meet capital and management standards comparable to the standards applied to U.S. banks.

As a second issue, some commenters claim that this requirement could greatly impact the ability of a foreign bank electing FHC status to align itself with other non-U.S. banks through strategic minority investments of greater than 25 percent of voting shares. Commenters argue that the electing foreign bank or company can have statutory "control" over another foreign bank for purposes of U.S. banking law when the electing foreign bank does not have majority control over the other foreign bank. If the other foreign bank does not meet the well capitalized and well managed standards, the electing foreign bank may not have the ability to direct the other foreign bank to improve its capital and management in order to meet the FHC standards or, alternatively, to close or divest its U.S. offices. In such instance, the electing foreign bank would be required to either divest its investment in the other foreign bank or forgo the opportunity to engage in the expanded activities in the United States.

The final rule retains as a general rule the requirement that each foreign bank within a banking group that maintains U.S. offices must meet the comparable capital and management standards. There may be limited situations involving strategic minority investments between foreign banks where some relief from this requirement may be justified. A foreign bank or company in this type of situation may utilize the pre-clearance process to request a determination that it should not be held accountable for another foreign bank with U.S. offices that does not meet the capital and management standards. The Board anticipates, however, that any relief from this requirement would be granted only in limited circumstances where the foreign bank can clearly demonstrate that it has no ability to control the other foreign bank.

Section 225.92—How Does an Election by a Foreign Bank Become Effective?

Section 225.92 describes the procedures and timing under which a foreign bank's FHC election will be effective and the situations under which the Board will find that the election is ineffective. Generally, an election will be effective on the 31st day after the date the election was received by the appropriate Federal Reserve Bank, unless the Board notifies the foreign bank or company prior to that time that

the Board has found that the election is ineffective or the period is extended with the consent of the foreign bank or company. The election may become effective prior to the 31st day after the date it was received if the foreign bank or company is so notified by the Board or the appropriate Federal Reserve Bank.

An election may be found by the Board to be ineffective if the Board finds that the foreign bank electing FHC status, any other foreign bank with U.S. offices that is controlled by the foreign bank or company electing FHC status, or any U.S. depository institution controlled by the electing foreign bank or company does not meet the applicable standards for capital or management. In addition, the Board may find an election ineffective if the Board determines that it does not have sufficient information to assess whether the foreign bank or company making the election meets the requirements of this subpart.

Some commenters criticized the processing provisions of the interim rule. As it was initially issued on January 19, 2000, § 225.92 stated that an election filed by a foreign bank or company would not be effective until the Board made an affirmative finding that the foreign bank was well capitalized and well managed. In its March 15, 2000, amendments to the interim rule, based on the Board's experience in reviewing and acting on foreign bank FHC elections during that period and to accommodate concerns expressed by commenters regarding the difference in process applicable to foreign banks, the Board revised the processing provision to make an election filed by a foreign bank that met the interim rule's quantitative capital requirements and the well managed standards effective on the 31st day after filing. The interim rule was amended at that time, however, to allow the Board to find an election ineffective if the Board did not have sufficient information to assess whether the foreign bank meets the capital and management standards.

One commenter argued that the separate election processing track for foreign banks may be in conflict with the Board's longstanding principle of providing national treatment for foreign banks. The commenter also claimed that the likelihood that the 31-day processing period for foreign banks will be extended is significantly increased because of the range of factors that the Board may, in its discretion, evaluate with respect to foreign banks and that this additional discretion also may cause the Board to determine that it

does not have sufficient information to declare the FHC election effective. Another commenter argued that if a foreign bank certified that it met the applicable capital and management standards in its FHC election, it must be permitted to engage in expanded financial activities on the 31st day after the date the election is received.

The final rule retains the processing provision in the amended interim rule. The Board has found that this provision does not lead to delays in dealing with certifications filed by foreign banks, all of which have been processed within 31 days. Similarly, a number of pre-clearance requests have been processed in the same time frame. The Board notes that it has ready access to all relevant information for U.S. banks and, thus, is assured of being able to make the appropriate judgments within the statutory timeframes. The Board does not similarly have ready access to all relevant information for foreign banks. The GLB Act requires the Board to apply comparable capital and management standards to foreign banks. There may be situations where foreign banks must submit additional information in order for the Board to be able to make a judgment on the qualifications of the foreign bank under the regulation. The limited discretion provided by the processing provisions of the final rule should ensure that the Board is not forced to deny a FHC election of a foreign bank because the foreign bank has not supplied additional information requested by the Board on a timely basis.²⁵

Section 225.93—What Are the Consequences of a Foreign Bank Failing To Continue To Meet Applicable Capital and Management Requirements?

Section 225.93 establishes the procedures to be followed when the Board finds that a foreign bank FHC no longer complies with the FHC standards. This section parallels § 225.83, with appropriate modifications. It sets out the procedures to be followed in the event that a foreign bank that is treated as a FHC ceases to meet the applicable capital and management requirements. It provides for the execution of an agreement designed to bring the foreign bank or company back into compliance with the requirements of the regulation and permits the Board to impose certain limitations on the U.S. activities of such

a foreign bank or company during any period of noncompliance. Finally, the section sets forth the consequences of a failure to correct the noncompliance within a period of 180 days. Such consequences could include termination of the foreign bank's U.S. branches and agencies and divestiture of its commercial lending company subsidiaries or ceasing to engage in the expanded activities permitted for financial holding companies.

The interim rule stated that, in taking any action under this provision, the Board would consult with the relevant Federal and state regulatory authorities. Some commenters noted that the section did not also expressly state that the Board would consult with the foreign bank's home country supervisor. Several commenters argued that consultations between the Board and the foreign banks' home country supervisors must take place in the case of non-compliance of a foreign bank with the FHC requirements. One commenter also stated that the interim rule's section provides for the active intervention of the Board in the management of the parent company of a foreign FHC which ceases to meet applicable capital and management standards and this authority harbors potentially serious extra-territorial implications.

As the U.S. supervisor responsible for the operations of foreign banks in the United States and of FHCs generally, the Board has supervisory responsibility to ensure that foreign banks and companies treated as FHCs engage in the expanded activities permitted by the GLB Act in the United States in a safe and sound manner.²⁶ This section relates only to the U.S. activities of a foreign bank or company FHC and does not involve extra-territorial extension of the Board's authority as host country supervisor. In accordance with Basel Committee guidelines, the Board generally informs a foreign bank's home country supervisor regarding any area of the foreign bank's U.S. business that raises a significant level of supervisory concern for the Board, including whether the foreign bank or its affiliates are in compliance with U.S. law and

²⁵ The Basel Committee has recognized the need for a banking authority to have the right to reject a license application "if it cannot be satisfied that the criteria set are met." Basel Committee on Banking Supervision, "Core Principles for Effective Banking Supervision" p.16 (1997).

²⁶ Under the IBA, the Board has the authority to take supervisory action against the U.S. offices of foreign bank if the Board determines that the foreign bank, or any affiliate of the foreign bank, has committed a violation of law or engaged in any unsafe or unsound banking practice in the United States. 12 U.S.C. 3105(e). In addition, the IBA expressly makes foreign banks with U.S. branches subject to the provisions of the BHC Act in the same manner and to the same extent that bank holding companies are subject to such provisions. 12 U.S.C. 3106(a).

regulation.²⁷ For the avoidance of doubt, the final rule expressly states that the Board will consult with the relevant home country supervisor of a foreign bank in taking any action under this section.

The final rule also adopts provisions that generally parallel the amendments made to § 225.83 with respect to triggering events for notifying the Board that the foreign bank has ceased to be well capitalized or well managed under the regulation.

Regulatory Flexibility Act

The Board has reviewed the final rule in accordance with the Regulatory Flexibility Act. This final rule implements provisions of Title I of the Gramm-Leach-Bliley Act that allow entities that qualify as FHCs to engage in a broad range of securities, insurance, and other financial activities by providing the Board with a simple, post-transaction notice. The rule should enable bank holding companies and foreign banks that qualify as financial holding companies to engage in an expanded range of activities by, in most cases, submitting a simple form to the appropriate Federal Reserve Bank describing the relevant activity.

The FHC election procedures described in this rule are voluntary, and the criteria set forth in the rule for an effective election filing are those established by the GLB Act. The rule implements this part of the GLB Act by requiring a simple, one-time procedure involving minimum paperwork to fulfill the statutory election requirement. In addition, the new powers described in the GLB Act and implemented by this rule should enhance the overall efficiency of bank holding companies and the other financial companies that seek to affiliate with them. The rule applies to all companies that attempt to qualify as financial holding companies, regardless of their size, and allows small organizations to take advantage of the broad new powers conferred by the GLB Act with minimal additional burden.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3506; 5 CFR part 1320 Appendix A.1), the Board reviewed the rule under the authority delegated to the Board by the Office of Management and Budget. The Federal Reserve may not conduct or sponsor, and an organization is not required to respond to, this information collection unless it displays a currently

valid OMB control number. The OMB control number is 7100-0292.

The collection of information requirements in this final rulemaking are found in 12 CFR 225.82 (a) and (b), 225.83 (b) and (c), 225.91 (a), 225.93 (b) and (c); and 225.87, 225.88, and 225.89. This information is required to evidence compliance with the requirements of Title I of the Gramm-Leach-Bliley Act (Pub. L. 106-103, 113 Stat. 1338 (1999)) which amends section 4 of the Bank Holding Company Act (12 U.S.C. 1843). The respondents are current and future bank holding companies and foreign banking organizations; and financial holding companies, respectively.

The notice cited in 12 CFR 225.82(a) provides that a bank holding company may elect to become a financial holding company by filing a simple written declaration with the Federal Reserve. The declaration must include information identifying the company's subsidiary depository institutions and their capital ratios, and a certification that each depository institution is well capitalized and well managed (for specific details, see 12 CFR 225.82 (b)). There will be no reporting form for this information collection. The agency form number for this declaration will be the FR 4010. The Board estimates that approximately 500 bank holding companies will file this declaration during the first year and that it will take approximately 15 minutes to complete this information. This would result in estimated annual burden of 125 hours. Based on a rate of \$20 per hour, the annual cost to the public for this information collection is estimated to be \$2,500.

The notice cited in 12 CFR 225.91(a) provides that a foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States, or a company that owns or controls such a foreign bank, may elect to be treated as a financial holding company by filing a written declaration with the appropriate Reserve Bank. The declaration must state that they intend to be treated as an FHC; include their risk-based capital ratios, amount of Tier 1 capital, and total assets; certify that they are well capitalized and well managed; certify that all U.S. depository institution subsidiaries of the foreign bank or company are well capitalized and well managed; and provide the capital ratios for each U.S. depository institution subsidiaries of the foreign bank or company (for specific details, see 12 CFR 225.91(b)). There will be no reporting form for this information collection. The agency form number for this declaration will be the FR 4010.

The Board estimates that approximately 15 foreign banks will file this declaration during the first year and that it will take approximately 30 minutes to complete this information. This would result in estimated annual burden of 7.5 hours. Based on a rate of \$20 per hour, the annual cost to the public for this information collection is estimated to be \$150.

The notice cited in 12 CFR 225.83(b) provides that a financial holding company with subsidiary depository institutions that cease to be well managed or capitalized, must notify the Federal Reserve and execute an agreement acceptable to the Federal Reserve within 45 days. Similarly, the notice cited in 12 CFR 225.93(b) provides that if a foreign bank, any foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, or any U.S. depository institution subsidiary of the foreign bank or company that cease to be well capitalized or well managed, the foreign bank or parent company must notify the Federal Reserve and execute an agreement acceptable to the Federal Reserve within 45 days. If the financial holding company or foreign bank would like to request additional time they must provide an explanation of why an extension is necessary. For specific details about what should be included in this agreement, see 12 CFR 225.83(c)(3) and 225.93(c)(3), respectively. There will be no reporting form for this information collection. The agency form number will be the FR 4012. The Federal Reserve estimates that due to the new incentives, only 10 subsidiary depository institutions of financial holding companies and only 1 subsidiary of a foreign bank will fall into this category per year and that it would take approximately 10 hours to complete this information. This would result in estimated annual burden of 110 hours. Based on a rate of \$20 per hour, the annual cost to the public for this information collection would be \$2,200.

The post-transaction notice cited in 12 CFR 225.87(a) provides that a financial holding company that commences an activity or acquires shares of a company engaged in an activity listed in § 225.86, must notify the appropriate Federal Reserve Bank in writing within 30 calendar days. See 12 CFR 225.87(a) for specific details on the content of the notice. There are reporting forms for this information collection. For domestic FHCs, this form is the FR Y-6A (OMB No. 7100-0124) and for foreign FHCs, the form is the FR Y-7A (OMB No. 7100-0125). 65 FR 20821 (April 18, 2000). These forms

²⁷ Working group of the Basel Committee on Banking Supervision and the Offshore Group of Banking Supervisors, "The Supervision of Cross-Border Banking" section III(b) ¶ 14 (Oct. 1996).

shortly will be replaced by the FR Y-10 and FR Y-10F (OMB No. 7100-0297), respectively.

The Federal Reserve estimates that financial holding companies will make 450 filings of this notice annually and that it would take approximately 1 hour to complete this notification. This would result in an estimated annual burden of 450 hours. Based on a rate of \$20 per hour, the annual cost to the public for this information collection would be \$9,000.

Financial holding companies requesting the Board's determination that an activity is financial in nature or incidental to a financial activity must provide to the Board the information described in 12 CFR 225.88(b). Financial holding companies may request an advisory opinion from the Board about whether a specific proposed activity falls within the scope of an activity listed in 12 CFR 225.86 as financial in nature or incidental to a financial activity by submitting the information described in 12 CFR 225.88(e). Financial holding companies that seek prior approval to engage in an activity that the financial holding company believes is complementary to a financial activity must provide to the Board the information identified in 12 CFR 225.89(a). The Federal Reserve estimates that only 25 financial holding companies would file the information requested in these sections annually and that it would take approximately 1 hour to complete each information collection. This would result in estimated annual burden of 25 hours. Based on a rate of \$20 per hour, the annual cost to the public for this information collection would be \$500.

A bank holding company may request confidentiality for the information contained in these information collections pursuant to section (b)(4) and (b)(6) of the Freedom of Information Act (5 U.S.C. 552(b)(4) and (b)(6)).

The Federal Reserve has a continuing interest in the public's opinions of our collections of information. At any time, comments regarding the burden estimate, or any other aspect of this collection of information, including suggestions for reducing the burden, may be sent to: Secretary, Board of Governors of the Federal Reserve System, 20th and C Streets, NW., Washington, DC 20551; and to the Office of Management and Budget, Paperwork Reduction Project (7100-0292), Washington, DC 20503.

List of Subjects in 12 CFR Part 225

Administrative practice and procedure, Banks, Banking, Federal Reserve System, Holding companies,

Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, the Board amends 12 CFR part 225 as follows:

PART 225—BANK HOLDING COMPANIES AND CHANGE IN BANK CONTROL (REGULATION Y)

1. The authority citation for part 225 is amended to read as follows:

Authority: 12 U.S.C. 1817(j)(13), 1818, 1828(o), 1831i, 1831p-1, 1843(c)(8), 1843(k), 1844(b), 1972(l), 2903, 2905, 3106, 3108, 3310, 3331-3351, 3907, and 3909.

2. In subpart A, § 225.1, a new paragraph (c)(9) is added to read as follows:

§ 225.1 Authority, purpose, and scope.

* * * * *

(c) * * *

(9) Subpart I establishes the procedure by which a bank holding company may elect to become a financial holding company, enumerates the consequences if a financial holding company ceases to meet a requirement applicable to a financial holding company, lists the activities in which a financial holding company may engage, establishes the procedure by which a person may request the Board to authorize additional activities as financial in nature or incidental thereto, and establishes the procedure by which a financial holding company may seek approval to engage in an activity that is complementary to a financial activity.

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3. In subpart A, § 225.2 is amended by revising paragraph (r)(2) and (s) and adding paragraph (t) to read as follows:

§ 225.2 Definitions

* * * * *

(r) * * *

(2) *Insured and uninsured depository institution*—(i) *Insured depository institution*. In the case of an insured depository institution, “well capitalized” means that the institution has and maintains at least the capital levels required to be well capitalized under the capital adequacy regulations or guidelines applicable to the institution that have been adopted by the appropriate Federal banking agency for the institution under section 38 of the Federal Deposit Insurance Act (12 U.S.C. 1831o).

(ii) *Uninsured depository institution*. In the case of a depository institution the deposits of which are not insured by the Federal Deposit Insurance Corporation, “well capitalized” means that the institution has and maintains at least the capital levels required for an

insured depository institution to be well capitalized.

* * * * *

(s) *Well managed*—(1) *In general*. Except as otherwise provided in this part, a company or depository institution is well managed if:

(i) At its most recent inspection or examination or subsequent review by the appropriate Federal banking agency for the company or institution (or the appropriate state banking agency in an examination described in section 10(d) of the Federal Deposit Insurance Act (12 U.S.C. 1820(d)), the company or institution received:

(A) At least a satisfactory composite rating; and

(B) At least a satisfactory rating for management, if such rating is given.

(ii) In the case of a company or depository institution that has not received an inspection or examination rating, the Board has determined, after a review of the managerial and other resources of the company or depository institution and after consulting with the appropriate Federal and state banking agencies, as applicable, for the company or institution, that the company or institution is well managed.

(2) *Merged depository institutions*—(i) *Merger involving well managed institutions*. A depository institution that results from the merger of two or more depository institutions that are well managed shall be considered to be well managed unless the Board determines otherwise after consulting with the appropriate Federal and state banking agencies, as applicable, for each depository institution involved in the merger.

(ii) *Merger involving a poorly rated institution*. A depository institution that results from the merger of a depository institution that is well managed with one or more depository institutions that are not well managed or have not been examined shall be considered to be well managed if the Board determines, after a review of the managerial and other resources of the resulting depository institution and after consulting with the appropriate Federal and state banking agencies for the institutions involved in the merger, as applicable, that the resulting institution is well managed.

(3) *Foreign banking organizations*. Except as otherwise provided in this part, a foreign banking organization is considered well managed if the combined operations of the foreign banking organization in the United States have received at least a satisfactory composite rating at the most recent annual assessment.

(t) *Depository institution*. For purposes of this part, the term

“depository institution” has the same meaning as in section 3(c) of the Federal Deposit Insurance Act (12 U.S.C. 1813(c)).

* * * * *

4. In subpart B, § 225.14(c)(2)(i) is revised to read as follows:

§ 225.14 Expedited action for certain bank acquisitions by well-run bank holding companies i

* * * * *

(c) * * *

(2) *Well managed organization*—(i) *Satisfactory examination ratings.* At the time of the transaction, the acquiring bank holding company, its lead insured depository institution, and insured depository institutions that control at least 80 percent of the total risk-weighted assets of insured depository institutions controlled by the holding company are well managed and have received at least a satisfactory rating for compliance at their most recent examination if such rating was given;

* * * * *

5. In subpart C, § 225.23(c)(2)(i) is revised to read as follows:

§ 225.23 Expedited action for certain nonbanking proposals by well-run bank holding companies

* * * * *

(c) * * *

(2) *Well managed organization*—(i) *Satisfactory examination ratings.* At the time of the transaction, the acquiring bank holding company, its lead insured depository institution, and insured depository institutions that control at least 80 percent of the total risk-weighted assets of insured depository institutions controlled by the holding company are well managed and have received at least a satisfactory rating for compliance at their most recent examination if such rating was given;

* * * * *

6. Subpart I is revised to read as follows:

Subpart I—Financial Holding Companies

Sec.

225.81 What is a financial holding company?

225.82 How does a bank holding company elect to become a financial holding company?

225.83 What are the consequences of failing to continue to meet applicable capital and management requirements?

225.84 What are the consequences of failing to maintain a satisfactory or better rating under the Community Reinvestment Act at all insured depository institution subsidiaries?

225.85 Is notice to or approval from the Board required prior to engaging in a financial activity?

225.86 What activities are permissible for any financial holding company?

225.87 Is notice to the Board required after engaging in a financial activity?

225.88 How to request the Board to determine that an activity is financial in nature or incidental to a financial activity?

225.89 How to request approval to engage in an activity that is complementary to a financial activity?

225.90 What are the requirements for a foreign bank to be treated as a financial holding company?

225.91 How may a foreign bank elect to be treated as a financial holding company?

225.92 How does an election by a foreign bank become effective?

225.93 What are the consequences of a foreign bank failing to continue to meet applicable capital and management requirements?

225.94 What are the consequences of an insured branch or depository institution failing to maintain a satisfactory or better rating under the Community Reinvestment Act?

Subpart I—Financial Holding Companies

§ 225.81 What is a financial holding company?

(a) *Definition.* A financial holding company is a bank holding company that meets the requirements of this section.

(b) *Requirements to be a financial holding company.* In order to be a financial holding company:

(1) All depository institutions controlled by the bank holding company must be and remain well capitalized;

(2) All depository institutions controlled by the bank holding company must be and remain well managed; and

(3) The bank holding company must have made an effective election to become a financial holding company.

(c) *Requirements for foreign banks that are or are owned by bank holding companies*—(1) *Foreign banks with U.S. branches or agencies that also own U.S. banks.* A foreign bank that is a bank holding company and that operates a branch or agency or owns or controls a commercial lending company in the United States must comply with the requirements of this section, § 225.82, and §§ 225.90 through 225.92 in order to be a financial holding company. After it becomes a financial holding company, a foreign bank described in this paragraph will be subject to the provisions of §§ 225.83, 225.84, 225.93, and 225.94.

(2) *Bank holding companies that own foreign banks with U.S. branches or agencies.* A bank holding company that owns a foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States must comply with the requirements of this section, § 225.82, and §§ 225.90 through 225.92 in order to be a financial holding company. After it becomes a financial holding company, a bank holding company described in this paragraph will be subject to the provisions of §§ 225.83, 225.84, 225.93, and 225.94.

(2) *Bank holding companies that own foreign banks with U.S. branches or agencies.* A bank holding company that owns a foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States must comply with the requirements of this section, § 225.82, and §§ 225.90 through 225.92 in order to be a financial holding company. After it becomes a financial holding company, a bank holding company described in this paragraph will be subject to the provisions of §§ 225.83, 225.84, 225.93, and 225.94.

requirements of this section, § 225.82, and §§ 225.90 through 225.92 in order to be a financial holding company. After it becomes a financial holding company, a bank holding company described in this paragraph will be subject to the provisions of §§ 225.83, 225.84, 225.93, and 225.94.

§ 225.82 How does a bank holding company elect to become a financial holding company?

(a) *Filing requirement.* A bank holding company may elect to become a financial holding company by filing a written declaration with the appropriate Reserve Bank. A declaration by a bank holding company is considered to be filed on the date that all information required by paragraph (b) of this section is received by the appropriate Reserve Bank.

(b) *Contents of declaration.* To be deemed complete, a declaration must:

(1) State that the bank holding company elects to be a financial holding company;

(2) Provide the name and head office address of the bank holding company and of each depository institution controlled by the bank holding company;

(3) Certify that each depository institution controlled by the bank holding company is well capitalized as of the date the bank holding company submits its declaration;

(4) Provide the capital ratios as of the close of the previous quarter for all relevant capital measures, as defined in section 38 of the Federal Deposit Insurance Act (12 U.S.C. 1831o), for each depository institution controlled by the company on the date the company submits its declaration; and

(5) Certify that each depository institution controlled by the company is well managed as of the date the company submits its declaration.

(c) *Effectiveness of election.* An election by a bank holding company to become a financial holding company shall not be effective if, during the period provided in paragraph (e) of this section, the Board finds that, as of the date the declaration was filed with the appropriate Reserve Bank:

(1) Any insured depository institution controlled by the bank holding company (except an institution excluded under paragraph (d) of this section) has not achieved at least a rating of “satisfactory record of meeting community credit needs” under the Community Reinvestment Act at the institution’s most recent examination; or

(2) Any depository institution controlled by the bank holding company

is not both well capitalized and well managed.

(d) *Consideration of the CRA performance of a recently acquired insured depository institution.* Except as provided in paragraph (f) of this section, an insured depository institution will be excluded for purposes of the review of the Community Reinvestment Act rating provisions of paragraph (c)(1) of this section if:

(1) The bank holding company acquired the insured depository institution during the 12-month period preceding the filing of an election under paragraph (a) of this section;

(2) The bank holding company has submitted an affirmative plan to the appropriate Federal banking agency for the institution to take actions necessary for the institution to achieve at least a rating of "satisfactory record of meeting community credit needs" under the Community Reinvestment Act at the next examination of the institution; and

(3) The appropriate Federal banking agency for the institution has accepted the plan described in paragraph (d)(2) of this section.

(e) *Effective date of election—(1) In general.* An election filed by a bank holding company under paragraph (a) of this section is effective on the 31st calendar day after the date that a complete declaration was filed with the appropriate Reserve Bank, unless the Board notifies the bank holding company prior to that time that the election is ineffective.

(2) *Earlier notification that an election is effective.* The Board or the appropriate Reserve Bank may notify a bank holding company that its election to become a financial holding company is effective prior to the 31st day after the date that a complete declaration was filed with the appropriate Reserve Bank. Such a notification must be in writing.

(f) *Requests to become a financial holding company submitted as part of an application to become a bank holding company—(1) In general.* A company that is not a bank holding company and has applied for the Board's approval to become a bank holding company under section 3(a)(1) of the BHC Act (12 U.S.C. 1842(a)(1)) may as part of that application submit a request to become a financial holding company.

(2) *Contents of request.* A request to become a financial holding company submitted as part of an application to become a bank holding company must:

(i) State that the company seeks to become a financial holding company on consummation of its proposal to become a bank holding company; and

(ii) Certify that each depository institution that would be controlled by the company on consummation of its proposal to become a bank holding company will be both well capitalized and well managed as of the date the company consummates the proposal.

(3) *Request becomes a declaration and an effective election on date of consummation of bank holding company proposal.* A complete request submitted by a company under this paragraph (f) becomes a complete declaration by a bank holding company for purposes of section 4(l) of the BHC Act (12 U.S.C. 1843(l)) and becomes an effective election for purposes of § 225.81(b) on the date that the company lawfully consummates its proposal under section 3 of the BHC Act (12 U.S.C. 1842), unless the Board notifies the company at any time prior to consummation of the proposal and that:

(i) Any depository institution that would be controlled by the company on consummation of the proposal will not be both well capitalized and well managed on the date of consummation; or

(ii) Any insured depository institution that would be controlled by the company on consummation of the proposal has not achieved at least a rating of "satisfactory record of meeting community credit needs" under the Community Reinvestment Act at the institution's most recent examination.

(4) *Limited exclusion for recently acquired institutions not available.* Unless the Board determines otherwise, an insured depository institution that is controlled or would be controlled by the company as part of its proposal to become a bank holding company may not be excluded for purposes of evaluating the Community Reinvestment Act criterion described in this paragraph or in paragraph (d) of this section.

(g) *Board's authority to exercise supervisory authority over a financial holding company.* An effective election to become a financial holding company does not in any way limit the Board's statutory authority under the BHC Act, the Federal Deposit Insurance Act, or any other relevant Federal statute to take appropriate action, including imposing supervisory limitations, restrictions, or prohibitions on the activities and acquisitions of a bank holding company that has elected to become a financial holding company, or enforcing compliance with applicable law.

§ 225.83 What are the consequences of failing to continue to meet applicable capital and management requirements?

(a) *Notice by the Board.* If the Board finds that a financial holding company controls any depository institution that is not well capitalized or well managed, the Board will notify the company in writing that it is not in compliance with the applicable requirement(s) for a financial holding company and identify the area(s) of noncompliance. The Board may provide this notice at any time before or after receiving notice from the financial holding company under paragraph (b) of this section.

(b) *Notification by a financial holding company required—(1) Notice to Board.* A financial holding company must notify the Board in writing within 15 calendar days of becoming aware that any depository institution controlled by the company has ceased to be well capitalized or well managed. This notification must identify the depository institution involved and the area(s) of noncompliance.

(2) *Triggering events for notice to the Board—(i) Well capitalized.* A company becomes aware that a depository institution it controls is no longer well capitalized upon the occurrence of any material event that would change the category assigned to the institution for purposes of section 38 of the Federal Deposit Insurance Act (12 U.S.C. 1831o). See 12 CFR 6.3(b)–(c), 208.42(b)–(c), and 325.102(b)–(c).

(ii) *Well managed.* A company becomes aware that a depository institution it controls is no longer well managed at the time the depository institution receives written notice from the appropriate Federal or state banking agency that either its composite rating or its rating for management is not at least satisfactory.

(c) *Execution of agreement acceptable to the Board—(1) Agreement required; time period.* Within 45 days after receiving a notice from the Board under paragraph (a) of this section, the company must execute an agreement acceptable to the Board to comply with all applicable capital and management requirements.

(2) *Extension of time for executing agreement.* Upon request by a company, the Board may extend the 45-day period under paragraph (c)(1) of this section if the Board determines that granting additional time is appropriate under the circumstances. A request by a company for additional time must include an explanation of why an extension is necessary.

(3) *Agreement requirements.* An agreement required by paragraph (c)(1)

of this section to correct a capital or management deficiency must:

- (i) Explain the specific actions that the company will take to correct all areas of noncompliance;
- (ii) Provide a schedule within which each action will be taken;
- (iii) Provide any other information that the Board may require; and
- (iv) Be acceptable to the Board.

(d) *Limitations during period of noncompliance*—Until the Board determines that a company has corrected the conditions described in a notice under paragraph (a) of this section:

(1) The Board may impose any limitations or conditions on the conduct or activities of the company or any of its affiliates as the Board finds to be appropriate and consistent with the purposes of the BHC Act; and

(2) The company and its affiliates may not commence any additional activity or acquire control or shares of any company under section 4(k) of the BHC Act without prior approval from the Board.

(e) *Consequences of failure to correct conditions within 180 days*—(1) *Divestiture of depository institutions*. If a company does not correct the conditions described in a notice under paragraph (a) of this section within 180 days of receipt of the notice or such additional time as the Board may permit, the Board may order the company to divest ownership or control of any depository institution owned or controlled by the company. Such divestiture must be done in accordance with the terms and conditions established by the Board.

(2) *Alternative method of complying with a divestiture order*. A company may comply with an order issued under paragraph (e)(1) of this section by ceasing to engage (both directly and through any subsidiary that is not a depository institution or a subsidiary of a depository institution) in any activity that may be conducted only under section 4(k), (n), or (o) of the BHC Act (12 U.S.C. 1843(k), (n), or (o)). The termination of activities must be completed within the time period referred to in paragraph (e)(1) of this section and in accordance with the terms and conditions acceptable to the Board.

(f) *Consultation with other agencies*. In taking any action under this section, the Board will consult with the relevant Federal and state regulatory authorities.

§ 225.84 What are the consequences of failing to maintain a satisfactory or better rating under the Community Reinvestment Act at all insured depository institution subsidiaries?

(a) *Limitations on activities*—(1) *In general*. Upon receiving a notice regarding performance under the Community Reinvestment Act in accordance with paragraph (a)(2) of this section, a financial holding company may not:

- (i) Commence any additional activity under section 4(k) or 4(n) of the BHC Act (12 U.S.C. 1843(k) or (n)); or
- (ii) Directly or indirectly acquire control, including all or substantially all of the assets, of a company engaged in any activity under section 4(k) or 4(n) of the BHC Act (12 U.S.C. 1843(k) or (n)).

(2) *Notification*. A financial holding company receives notice for purposes of this paragraph at the time that the appropriate Federal banking agency for any insured depository institution controlled by the company or the Board provides notice to the institution or company that the institution has received a rating of “needs to improve record of meeting community credit needs” or “substantial noncompliance in meeting community credit needs” in the institution’s most recent examination under the Community Reinvestment Act.

(b) *Exceptions for certain activities*—(1) *Continuation of investment activities*. The prohibition in paragraph (a) of this section does not prevent a financial holding company from continuing to make investments in the ordinary course of conducting merchant banking activities under section 4(k)(4)(H) of the BHC Act (12 U.S.C. 1843(k)(4)(H)) or insurance company investment activities under section 4(k)(4)(I) of the BHC Act (12 U.S.C. 1843(k)(4)(I)) if:

- (i) The financial holding company lawfully was a financial holding company and commenced the merchant banking activity under section 4(k)(4)(H) of the BHC Act (12 U.S.C. 1843(k)(4)(H)) or the insurance company investment activity under section 4(k)(4)(I) of the BHC Act (12 U.S.C. 1843(k)(4)(I)) prior to the time that an insured depository institution controlled by the financial holding company received a rating below “satisfactory record of meeting community credit needs” under the Community Reinvestment Act; and
- (ii) The Board has not, in the exercise of its supervisory authority, advised the financial holding company that these activities must be restricted.

(2) *Activities that are closely related to banking*. The prohibition in paragraph (a) of this section does not

prevent a financial holding company from commencing any additional activity or acquiring control of a company engaged in any activity under section 4(c) of the BHC Act (12 U.S.C. 1843(c)), if the company complies with the notice, approval, and other requirements of that section and section 4(j) of the BHC Act (12 U.S.C. 1843(j)).

(c) *Duration of prohibitions*. The prohibitions described in paragraph (a) of this section shall continue in effect until such time as each insured depository institution controlled by the financial holding company has achieved at least a rating of “satisfactory record of meeting community credit needs” under the Community Reinvestment Act at the most recent examination of the institution.

§ 225.85 Is notice to or approval from the Board required prior to engaging in a financial activity?

(a) *No prior approval required generally*—(1) *In general*. A financial holding company and any subsidiary (other than a depository institution or subsidiary of a depository institution) of the financial holding company may engage in any activity listed in § 225.86, or acquire shares or control of a company engaged exclusively in activities listed in § 225.86, without providing prior notice to or obtaining prior approval from the Board unless required under paragraph (c) of this section.

(2) *Acquisitions by a financial holding company of a company engaged in other permissible activities*. In addition to the activities listed in § 225.86, a company acquired or to be acquired by a financial holding company under paragraph (a)(1) of this section may engage in activities otherwise permissible for a financial holding company under this part in accordance with any applicable notice, approval, or other requirement.

(3) *Acquisition by a financial holding company of a company engaged in limited nonfinancial activities*—(i) *Mixed acquisitions generally permitted*. A financial holding company may under this subpart acquire more than 5 percent of the outstanding shares of any class of voting securities or control of a company that is not engaged exclusively in activities that are financial in nature, incidental to a financial activity, or otherwise permissible for the financial holding company under section 4(c) of the BHC Act (12 U.S.C. 1843(c)) if:

- (A) The company to be acquired is substantially engaged in activities that are financial in nature, incidental to a financial activity, or otherwise permissible for the financial holding

company under section 4(c) of the BHC Act (12 U.S.C. 1843(c));

(B) The financial holding company complies with the notice requirements of § 225.87, if applicable; and

(C) The company conforms, terminates, or divests, within 2 years of the date the financial holding company acquires shares or control of the company, all activities that are not financial in nature, incidental to a financial activity, or otherwise permissible for the financial holding company under section 4(c) (12 U.S.C. 1843(c)) of the BHC Act.

(ii) *Definition of "substantially engaged."* Unless the Board determines otherwise, a company will be considered to be "substantially engaged" in activities permissible for a financial holding company for purposes of paragraph (a)(3)(A) of this section if at least 85 percent of the company's consolidated total annual gross revenues is derived from and at least 85 percent of the company's consolidated total assets is attributable to the conduct of activities that are financial in nature, incidental to a financial activity, or otherwise permissible for a financial holding company under section 4(c) of the BHC Act (12 U.S.C. 1843(c)).

(b) *Locations in which a financial holding company may conduct financial activities.* A financial holding company may conduct any activity listed in § 225.86 at any location in the United States or at any location outside of the United States subject to the laws of the jurisdiction in which the activity is conducted.

(c) *Circumstances under which prior notice to the Board is required—*(1) *Acquisition of more than 5 percent of the shares of a savings association.* A financial holding company must obtain Board approval in accordance with section 4(j) of the BHC Act (12 U.S.C. 1843(j)) and either § 225.14 or § 225.24, as appropriate, prior to acquiring control or more than 5 percent of the outstanding shares of any class of voting securities of a savings association or of a company that owns, operates, or controls a savings association.

(2) *Supervisory actions.* The Board may, if appropriate in the exercise of its supervisory or other authority, including under § 225.82(g) or § 225.83(d) or other relevant authority, require a financial holding company to provide notice to or obtain approval from the Board prior to engaging in any activity or acquiring shares or control of any company.

§ 225.86 What activities are permissible for any financial holding company?

The following activities are financial in nature or incidental to a financial activity:

(a) *Activities determined to be closely related to banking.* (1) Any activity that the Board had determined by regulation prior to November 12, 1999, to be so closely related to banking as to be a proper incident thereto, subject to the terms and conditions contained in this part, unless modified by the Board. These activities are listed in § 225.28.

(2) Any activity that the Board had determined by an order that was in effect on November 12, 1999, to be so closely related to banking as to be a proper incident thereto, subject to the terms and conditions contained in this part and those in the authorizing orders. These activities are:

(i) Providing administrative and other services to mutual funds (*Societe Generale*, 84 Federal Reserve Bulletin 680 (1998));

(ii) Owning shares of a securities exchange (*J.P. Morgan & Co, Inc., and UBS AG*, 86 Federal Reserve Bulletin 61 (2000));

(iii) Acting as a certification authority for digital signatures and authenticating the identity of persons conducting financial and nonfinancial transactions (*Bayerische Hypo- und Vereinsbank AG, et al.*, 86 Federal Reserve Bulletin 56 (2000));

(iv) Providing employment histories to third parties for use in making credit decisions and to depository institutions and their affiliates for use in the ordinary course of business (*Norwest Corporation*, 81 Federal Reserve Bulletin 732 (1995));

(v) Check cashing and wire transmission services (*Midland Bank, PLC*, 76 Federal Reserve Bulletin 860 (1990) (check cashing); *Norwest Corporation*, 81 Federal Reserve Bulletin 1130 (1995) (money transmission));

(vi) In connection with offering banking services, providing notary public services, selling postage stamps and postage-paid envelopes, providing vehicle registration services, and selling public transportation tickets and tokens (*Popular, Inc.*, 84 Federal Reserve Bulletin 481 (1998)); and

(vii) Real estate title abstracting (*The First National Company*, 81 Federal Reserve Bulletin 805 (1995)).

(b) *Activities determined to be usual in connection with the transaction of banking abroad.* Any activity that the Board had determined by regulation in effect on November 11, 1999, to be usual in connection with the transaction of banking or other financial operations

abroad (see § 211.5(d) of this chapter), subject to the terms and conditions in part 211 and Board interpretations in effect on that date regarding the scope and conduct of the activity. In addition to the activities listed in paragraphs (a) and (c) of this section, these activities are:

(1) Providing management consulting services, including to any person with respect to nonfinancial matters, so long as the management consulting services are advisory and do not allow the financial holding company to control the person to which the services are provided;

(2) Operating a travel agency in connection with financial services offered by the financial holding company or others; and

(3) Organizing, sponsoring, and managing a mutual fund, so long as:

(i) The fund does not exercise managerial control over the entities in which the fund invests; and

(ii) The financial holding company reduces its ownership in the fund, if any, to less than 25 percent of the equity of the fund within one year of sponsoring the fund or such additional period as the Board permits.

(c) *Activities permitted under section 4(k)(4) of the BHC Act* (12 U.S.C. 1843(k)(4)). Any activity defined to be financial in nature under sections 4(k)(4)(A) through (E), (H) and (I) of the BHC Act (12 U.S.C. 1843(k)(4)(A) through (E), (H) and (I)).

§ 225.87 Is notice to the Board required after engaging in a financial activity?

(a) *Post-transaction notice generally required to engage in a financial activity.* A financial holding company that commences an activity or acquires shares of a company engaged in an activity listed in § 225.86 must notify the appropriate Reserve Bank in writing within 30 calendar days after commencing the activity or consummating the acquisition by using the appropriate form.

(b) *Cases in which notice to the Board is not required—*(1) *Acquisitions that do not involve control of a company.* A notice under paragraph (a) of this section is not required in connection with the acquisition of shares of a company if, following the acquisition, the financial holding company does not control the company.

(2) *No additional notice required to engage de novo* in an activity for which a financial holding company already has provided notice. After a financial holding company provides the appropriate Reserve Bank with notice that the company is engaged in an activity listed in § 225.86, a financial

holding company may, unless otherwise notified by the Board, commence the activity *de novo* through any subsidiary that the financial holding company is authorized to control without providing additional notice under paragraph (a) of this section.

(3) *Conduct of certain investment activities.* Unless required by paragraph (b)(4) of this section, a financial holding company is not required to provide notice under paragraph (a) of this section of any individual acquisition of shares of a company as part of the conduct by a financial holding company of securities underwriting, dealing, or market making activities as described in section 4(k)(4)(E) of the BHC Act (12 U.S.C. 1843(k)(4)(E)), merchant banking activities conducted pursuant to section 4(k)(4)(H) of the BHC Act (12 U.S.C. 1843(k)(4)(H)), or insurance company investment activities conducted pursuant to section 4(k)(4)(I) of the BHC Act (12 U.S.C. 1843(k)(4)(I)), if the financial holding company previously has notified the Board under paragraph (a) of this section that the company has commenced the relevant securities, merchant banking, or insurance company investment activities, as relevant.

(4) *Notice of large merchant banking or insurance company investments.* Notwithstanding paragraph (b)(1) or (b)(3) of this section, a financial holding company must provide notice under paragraph (a) of the section if:

(i) As part of a merchant banking activity conducted under section 4(k)(4)(H) of the BHC Act (12 U.S.C. 1843(k)(4)(H)), the financial holding company acquires more than 5 percent of the shares, assets, or ownership interests of any company at a total cost that exceeds the lesser of 5 percent of the financial holding company's Tier 1 capital or \$200 million;

(ii) As part of an insurance company investment activity conducted under section 4(k)(4)(I) of the BHC Act (12 U.S.C. 1843(k)(4)(I)), the financial holding company acquires more than 5 percent of the shares, assets, or ownership interests of any company at a total cost that exceeds the lesser of 5 percent of the financial holding company's Tier 1 capital or \$200 million; or

(iii) The Board in the exercise of its supervisory authority notifies the financial holding company that a notice is necessary.

§ 225.88 How to request the Board to determine that an activity is financial in nature or incidental to a financial activity?

(a) *Requests regarding activities that may be financial in nature or incidental*

to a financial activity. A financial holding company or other interested party may request a determination from the Board that an activity not listed in § 225.86 is financial in nature or incidental to a financial activity.

(b) *Required information.* A request submitted under this section must be in writing and must:

(1) Identify and define the activity for which the determination is sought, specifically describing what the activity would involve and how the activity would be conducted;

(2) Explain in detail why the activity should be considered financial in nature or incidental to a financial activity; and

(3) Provide information supporting the requested determination and any other information required by the Board concerning the proposed activity.

(c) *Board procedures for reviewing requests—(1) Consultation with the Secretary of the Treasury.* Upon receipt of the request, the Board will provide the Secretary of the Treasury a copy of the request and consult with the Secretary in accordance with section 4(k)(2)(A) of the BHC Act (12 U.S.C. 1843(k)(2)(A)).

(2) *Public notice.* The Board may, as appropriate and after consultation with the Secretary, publish a description of the proposal in the **Federal Register** with a request for public comment.

(d) *Board action.* The Board will endeavor to make a decision on any request filed under paragraph (a) of this section within 60 calendar days following the completion of both the consultative process described in paragraph (c)(1) of this section and the public comment period, if any.

(e) *Advisory opinions regarding scope of financial activities—(1) Written request.* A financial holding company or other interested party may request an advisory opinion from the Board about whether a specific proposed activity falls within the scope of an activity listed in § 225.86 as financial in nature or incidental to a financial activity. The request must be submitted in writing and must contain:

(i) A detailed description of the particular activity in which the company proposes to engage or the product or service the company proposes to provide;

(ii) An explanation supporting an interpretation regarding the scope of the permissible financial activity; and

(iii) Any additional information requested by the Board regarding the activity.

(2) *Board response.* The Board will provide an advisory opinion within 45 calendar days of receiving a complete

written request under paragraph (e)(1) of this section.

§ 225.89 How to request approval to engage in an activity that is complementary to a financial activity?

(a) *Prior Board approval is required.*

A financial holding company that seeks to engage in or acquire more than 5 percent of the outstanding shares of any class of voting securities of a company engaged in an activity that the financial holding company believes is complementary to a financial activity must obtain prior approval from the Board in accordance with section 4(j) of the BHC Act (12 U.S.C. 1843(j)). The notice must be in writing and must:

(1) Identify and define the proposed complementary activity, specifically describing what the activity would involve and how the activity would be conducted;

(2) Identify the financial activity for which the proposed activity would be complementary and provide detailed information sufficient to support a finding that the proposed activity should be considered complementary to the identified financial activity;

(3) Describe the scope and relative size of the proposed activity, as measured by the percentage of the projected financial holding company revenues expected to be derived from and assets associated with conducting the activity;

(4) Discuss the risks that conducting the activity may reasonably be expected to pose to the safety and soundness of the subsidiary depository institutions of the financial holding company and to the financial system generally;

(5) Describe the potential adverse effects, including potential conflicts of interest, decreased or unfair competition, or other risks, that conducting the activity could raise, and explain the measures the financial holding company proposes to take to address those potential effects;

(6) Describe the potential benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that the proposal reasonably can be expected to produce; and

(7) Provide any information about the financial and managerial resources of the financial holding company and any other information requested by the Board.

(b) *Factors for consideration by the Board.* In evaluating a notice to engage in a complementary activity, the Board must consider whether:

(1) The proposed activity is complementary to a financial activity;

(2) The proposed activity would pose a substantial risk to the safety or

soundness of depository institutions or the financial system generally; and

(3) The proposal could be expected to produce benefits to the public that outweigh possible adverse effects.

(c) *Board action.* The Board will inform the financial holding company in writing of the Board's determination regarding the proposed activity within the period described in section 4(j) of the BHC Act (12 U.S.C. 1843(j)).

§ 225.90 What are the requirements for a foreign bank to be treated as a financial holding company?

(a) *Foreign banks as financial holding companies.* A foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States, and any company that owns or controls such a foreign bank, will be treated as a financial holding company if:

(1) The foreign bank, any other foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, and any U.S. depository institution subsidiary that is owned or controlled by the foreign bank or company, is and remains well capitalized and well managed; and

(2) The foreign bank, and any company that owns or controls the foreign bank, has made an effective election to be treated as a financial holding company under this subpart.

(b) *Standards for "well capitalized."* A foreign bank will be considered "well capitalized" if either:

(1)(i) Its home country supervisor, as defined in § 211.21 of the Board's Regulation K (12 CFR 211.21), has adopted risk-based capital standards consistent with the Capital Accord of the Basel Committee on Banking Supervision (Basel Accord);

(ii) The foreign bank maintains a Tier 1 capital to total risk-based assets ratio of 6 percent and a total capital to total risk-based assets ratio of 10 percent, as calculated under its home country standard; and

(iii) The foreign bank's capital is comparable to the capital required for a U.S. bank owned by a financial holding company; or

(2) The foreign bank has obtained a determination from the Board under § 225.91(c) that the foreign bank's capital is otherwise comparable to the capital that would be required of a U.S. bank owned by a financial holding company.

(c) *Standards for "well managed."* A foreign bank will be considered "well managed" if:

(1) The foreign bank has received at least a satisfactory composite rating of

its U.S. branch, agency, and commercial lending company operations at its most recent assessment;

(2) The home country supervisor of the foreign bank consents to the foreign bank expanding its activities in the United States to include activities permissible for a financial holding company; and

(3) The management of the foreign bank meets standards comparable to those required of a U.S. bank owned by a financial holding company.

§ 225.91 How may a foreign bank elect to be treated as a financial holding company?

(a) *Filing requirement.* A foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States, or a company that owns or controls such a foreign bank, may elect to be treated as a financial holding company by filing a written declaration with the appropriate Reserve Bank.

(b) *Contents of declaration.* The declaration must:

(1) State that the foreign bank or the company elects to be treated as a financial holding company;

(2) Provide the risk-based capital ratios and amount of Tier 1 capital and total assets of the foreign bank, and of each foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, as of the close of the most recent quarter and as of the close of the most recent audited reporting period;

(3) Certify that the foreign bank, and each foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, meets the standards of well capitalized set out in § 225.90(b)(1)(i) and (ii) or § 225.90(b)(2) as of the date the foreign bank or company files its election;

(4) Certify that the foreign bank, and each foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, is well managed as defined in § 225.90(c)(1) as of the date the foreign bank or company files its election;

(5) Certify that all U.S. depository institution subsidiaries of the foreign bank or company are well capitalized and well managed as of the date the foreign bank or company files its election; and

(6) Provide the capital ratios for all relevant capital measures (as defined in section 38 of the Federal Deposit Insurance Act (12 U.S.C. 1831(o))) as of the close of the previous quarter for each U.S. depository institution

subsidiary of the foreign bank or company.

(c) *Pre-clearance process.* Before filing an election to be treated as a financial holding company, a foreign bank or company may file a request for review of its qualifications to be treated as a financial holding company. The Board will endeavor to make a determination on such requests within 30 days of receipt. A foreign bank that has not been found, or that is chartered in a country where no bank from that country has been found, by the Board under the Bank Holding Company Act or the International Banking Act to be subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor is required to use this process.

§ 225.92 How does an election by a foreign bank become effective?

(a) *In general.* An election described in § 225.91 is effective on the 31st day after the date that an election was received by the appropriate Federal Reserve Bank, unless the Board notifies the foreign bank or company prior to that time that:

(1) The election is ineffective; or

(2) The period is extended with the consent of the foreign bank or company making the election.

(b) *Earlier notification that an election is effective.* The Board or the appropriate Federal Reserve Bank may notify a foreign bank or company that its election to be treated as a financial holding company is effective prior to the 31st day after the election was filed with the appropriate Federal Reserve Bank. Such notification must be in writing.

(c) *Under what circumstances will the Board find an election to be ineffective?*

An election to be treated as a financial holding company shall not be effective if, during the period provided in paragraph (a) of this section, the Board finds that:

(1) The foreign bank certificant, or any foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States and is controlled by a foreign bank or company certificant, is not both well capitalized and well managed;

(2) Any U.S. insured depository institution subsidiary of the foreign bank or company (except an institution excluded under paragraph (d) of this section) or any U.S. branch of a foreign bank that is insured by the Federal Deposit Insurance Corporation has not achieved at least a rating of "satisfactory record of meeting community needs" under the Community Reinvestment Act

at the institution's most recent examination;

(3) Any U.S. depository institution subsidiary of the foreign bank or company is not both well capitalized and well managed; or

(4) The Board does not have sufficient information to assess whether the foreign bank or company making the election meets the requirements of this subpart.

(d) *How is CRA performance of recently acquired insured depository institutions considered?* An insured depository institution will be excluded for purposes of the review of CRA ratings described in paragraph (c)(2) of this section consistent with the provisions of § 225.82(d).

(e) *Factors used in the Board's determination regarding comparability of capital and management.*—(1) *In general.* In determining whether a foreign bank is well capitalized and well managed in accordance with comparable capital and management standards, the Board will give due regard to national treatment and equality of competitive opportunity. In this regard, the Board may take into account the foreign bank's composition of capital, Tier 1 capital to total assets leverage ratio, accounting standards, long-term debt ratings, reliance on government support to meet capital requirements, the foreign bank's anti-money laundering procedures, whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis, and other factors that may affect analysis of capital and management. The Board will consult with the home country supervisor for the foreign bank as appropriate.

(2) *Assessment of consolidated supervision.* A foreign bank that is not subject to comprehensive supervision on a consolidated basis by its home country authorities may not be considered well capitalized and well managed unless:

(i) The home country has made significant progress in establishing arrangements for comprehensive supervision on a consolidated basis; and

(ii) The foreign bank is in strong financial condition as demonstrated, for example, by capital levels that significantly exceed the minimum levels that are required for a well capitalized determination and strong asset quality.

§ 225.93 What are the consequences of a foreign bank failing to continue to meet applicable capital and management requirements?

(a) *Notice by the Board.* If a foreign bank or company has made an effective

election to be treated as a financial holding company under this subpart and the Board finds that the foreign bank, any foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, or any U.S. depository institution subsidiary controlled by the foreign bank or company, ceases to be well capitalized or well managed, the Board will notify the foreign bank and company, if any, in writing that it is not in compliance with the applicable requirement(s) for a financial holding company and identify the areas of noncompliance.

(b) *Notification by a financial holding company required.*—(1) *Notice to Board.* Promptly upon becoming aware that the foreign bank, any foreign bank that maintains a U.S. branch, agency, or commercial lending company and is controlled by the foreign bank or company, or any U.S. depository institution subsidiary of the foreign bank or company, has ceased to be well capitalized or well managed, the foreign bank and company, if any, must notify the Board and identify the area of noncompliance.

(2) *Triggering events for notice to the Board.*—(i) *Well capitalized.* A foreign bank becomes aware that it is no longer well capitalized at the time that the foreign bank or company is required to file a report of condition (or similar supervisory report) with its home country supervisor or the appropriate Federal Reserve Bank that indicates that the foreign bank no longer meets the well capitalized standards.

(ii) *Well managed.* A foreign bank becomes aware that it is no longer well managed at the time that the foreign bank receives written notice from the appropriate Federal Reserve Bank that the composite rating of its U.S. branch, agency, and commercial lending company operations is not at least satisfactory.

(c) *Execution of agreement acceptable to the Board.*—(1) *Agreement required; time period.* Within 45 days after receiving a notice under paragraph (a) of this section, the foreign bank or company must execute an agreement acceptable to the Board to comply with all applicable capital and management requirements.

(2) *Extension of time for executing agreement.* Upon request by the foreign bank or company, the Board may extend the 45-day period under paragraph (c)(1) of this section if the Board determines that granting additional time is appropriate under the circumstances. A request by a foreign bank or company for additional time must include an

explanation of why an extension is necessary.

(3) *Agreement requirements.* An agreement required by paragraph (c)(1) of this section to correct a capital or management deficiency must:

(i) Explain the specific actions that the foreign bank or company will take to correct all areas of noncompliance;

(ii) Provide a schedule within which each action will be taken;

(iii) Provide any other information that the Board may require; and

(iv) Be acceptable to the Board.

(d) *Limitations during period of noncompliance.*—Until the Board determines that a foreign bank or company has corrected the conditions described in a notice under paragraph (a) of this section:

(1) The Board may impose any limitations or conditions on the conduct or the U.S. activities of the foreign bank or company or any of its affiliates as the Board finds to be appropriate and consistent with the purposes of the Bank Holding Company Act; and

(2) The foreign bank or company and its affiliates may not commence any additional activity in the United States or acquire control or shares of any company under section 4(k) of the Bank Holding Company Act (12 U.S.C. 1843(k)) without prior approval from the Board.

(e) *Consequences of failure to correct conditions within 180 days.*—(1) *Termination of Offices and Divestiture.*

If a foreign bank or company does not correct the conditions described in a notice under paragraph (a) of this section within 180 days of receipt of the notice or such additional time as the Board may permit, the Board may order the foreign bank or company to terminate the foreign bank's U.S. branches and agencies and divest any commercial lending companies owned or controlled by the foreign bank or company. Such divestiture must be done in accordance with the terms and conditions established by the Board.

(2) *Alternative method of complying with a divestiture order.* A foreign bank or company may comply with an order issued under paragraph (e)(1) of this section by ceasing to engage (both directly and through any subsidiary that is not a depository institution or a subsidiary of a depository institution) in any activity that may be conducted only under section 4(k), (n), or (o) of the BHC Act (12 U.S.C. 1843(k), (n) and (o)). The termination of activities must be completed within the time period referred to in paragraph (e)(1) of this section and subject to terms and conditions acceptable to the Board.

(f) *Consultation with Other Agencies.* In taking any action under this section, the Board will consult with the relevant Federal and state regulatory authorities and the appropriate home country supervisor(s) of the foreign bank.

§ 225.94 What are the consequences of an insured branch or depository institution failing to maintain a satisfactory or better rating under the Community Reinvestment Act?

(a) *Insured branch as an “insured depository institution.”* A U.S. branch of

a foreign bank that is insured by the Federal Deposit Insurance Corporation shall be treated as an “insured depository institution” for purposes of § 225.84.

(b) *Applicability.* The provisions of § 225.84, with the modifications contained in this section, shall apply to a foreign bank that operates an insured branch referred to in paragraph (a) of this section or an insured depository institution in the United States, and any company that owns or controls such a

foreign bank, that has made an effective election under § 225.92 in the same manner and to the same extent as they apply to a financial holding company.

Dated: December 21, 2000.

By order of the Board of Governors of the Federal Reserve System.

Jennifer J. Johnson,

Secretary of the Board.

[FR Doc. 01-34 Filed 1-2-01; 8:45 am]

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Federal Register

**Wednesday,
January 3, 2001**

Part III

Environmental Protection Agency

**40 CFR Parts 413, 433, 438, 463, 464,
467, and 471**

**Effluent Limitations Guidelines,
Pretreatment Standards, and New Source
Performance Standards for the Metal
Products and Machinery Point Source
Category; Proposed Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 413, 433, 438, 463, 464, 467, and 471

[FRL-6897-6]

RIN 2040-AB79

Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Metal Products and Machinery Point Source Category; Proposed Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This proposal represents the Agency's second look at Clean Water Act national effluent limitations guidelines and pretreatment standards for wastewater discharges from metal products and machinery facilities. EPA initially proposed effluent limitations guidelines and pretreatment standards for a portion of this category on May 30, 1995 (60 FR 28210). This proposal completely replaces the 1995 proposal. Today's proposed regulation would establish technology-based effluent limitations guidelines and pretreatment standards for wastewater discharges associated with the operation of new and existing metal products and machinery facilities. The metal products and machinery industry includes facilities that manufacture, rebuild, or maintain metal products, parts, or machines.

EPA estimates that compliance with this regulation will reduce the discharge of conventional pollutants by at least

115 million pounds per year, priority pollutants by 12 million pounds per year, and nonconventional metal and organic pollutants by 43 million pounds per year for an estimated compliance cost of \$1.98 billion (pre-tax, 1999\$) annually. EPA estimates that the annual benefits of the proposal range from \$0.4 billion to \$1.1 billion. In addition, this proposal solicits comment on new methodologies for expanding the analysis to include additional categories of recreational benefits.

DATES: EPA must receive comments on the proposal by May 3, 2001. EPA is conducting a public meeting (9:00 AM—12:00 PM) and hearing on the pretreatment standards (1:00 PM—4:00 PM) for this proposed rule on each of the following dates: February 6, 2001 in Oakland, CA; February 13, 2001 in Dallas, TX; and February 22, 2001 in Washington, DC.

ADDRESSES: Submit written comments to, Mr. Michael Ebner, Office of Water, Engineering and Analysis Division (4303), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460 if by mail and to Mr. Michael Ebner, U.S. EPA, 401 M St., SW, Room 611 West Tower, Washington, DC 20460 if by hand delivery. Comments may also be sent via E-mail to "mpm.comments@epa.gov". Please submit any references cited in your comments. EPA requests an original and three copies of your comments and enclosures (including references). Commenters who want EPA to acknowledge receipt of their comments should enclose a self-addressed, stamped envelope. No facsimiles (faxes)

will be accepted. For additional information on how to submit electronic comments see "**SUPPLEMENTARY INFORMATION**, How to Submit Comments."

EPA will be holding public meetings and pretreatment hearings on today's proposal on three separate dates. The meeting in Oakland, CA will be held at the Oakland Marriott, City Center, 1001 Broadway, Oakland, CA 96607. The meeting in Dallas, TX will be held in the Oklahoma and Texas rooms at the EPA Region 6 Offices, 1455 Ross Avenue, Dallas, TX. The meeting in Washington, DC will be held in EPA's Auditorium, Waterside Mall, 401 M St. SW, Washington, DC.

EPA established the public record for this proposed rulemaking under docket number W-99-23. It is located in the Water Docket, East Tower Basement, 401 M St. SW, Washington, DC 20460. The record is available for inspection from 9 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. For access to the docket materials, call (202) 260-3027 to schedule an appointment. You may have to pay a reasonable fee for copying.

FOR FURTHER INFORMATION CONTACT: For technical information concerning today's proposed rule, contact Mr. Michael Ebner at (202) 260-5397 or Ms. Shari Barash at (202) 260-7130. For economic information contact Dr. Lynne Tudor at (202) 260-5834.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action include:

Category	Examples of regulated entities
Industry	<ul style="list-style-type: none"> Facilities that manufacture, maintain, or rebuild metal parts, products or machines used in the following sectors: Aerospace, Aircraft, Bus & Truck, Electronic Equipment, Hardware, Household Equipment, Instruments, Job Shops, Mobile Industrial Equipment, Motor Vehicles, Office Machines, Ordnance, Precious Metals and Jewelry, Printed Wiring Boards, Railroad, Ships and Boats, Stationary Industrial Equipment, and Miscellaneous Metal Products.
Government	<ul style="list-style-type: none"> State and local government facilities that manufacture, maintain, or rebuild metal parts, products or machines (e.g., a town that operates its own bus, truck, and/or snow removal equipment maintenance facility). Federal facilities that manufacture, maintain, or rebuild metal parts, products or machines (e.g., U.S. Naval Shipyards).

EPA does not intend the preceding table to be exhaustive, but rather it provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria proposed in

Sections III and VI.C and detailed further in section 438.1 of the proposed rule. If you have questions regarding the applicability of this action to a particular entity, consult one of the persons listed for technical information in the preceding **FOR FURTHER INFORMATION CONTACT** section.

How To Submit Comments

Electronic comments must be identified by the docket number W-99-

23 and must be submitted as an ASCII, or WordPerfect 5/6/7/8/9 or Microsoft Word 97 file avoiding the use of special characters and any form of encryption. EPA also will accept comments and data on disks in Word Perfect 5/6/7/8/9, Microsoft Word 97 or ASCII file format. Electronic comments on this notice may be filed online at some Federal Depository Libraries. No confidential business information (CBI) should be sent via e-mail. In the public record for

the final MP&M regulation, EPA will respond to comments from the 1995 Phase I proposal as well as today's proposal. Therefore, comments submitted on the Phase I rule do not need to resubmitted in response to this proposal.

Public Meeting and Pretreatment Hearing Information:

In each location, the public meeting will be held in the morning and the pretreatment hearing will be held in the afternoon (see **DATES** and **ADDRESSES** for dates and locations of public meetings and pretreatment hearings). During the public meeting, EPA will present information on the applicability of the proposed regulation, the technology options selected as the basis for the proposed limitations and standards, and the compliance costs and pollutant reductions. EPA will also allow time for questions and answers during this session. During the pretreatment hearing, the public will have the opportunity to provide oral comment to EPA. EPA will not address any issues raised during the pretreatment hearing at that time, but these comments will be recorded and included in the public record for the rule. Persons wishing to present formal comments at the public hearing should contact Mr. Michael Ebner before the hearing and should have a written copy of their comments for submittal.

Protection of Confidential Business Information

EPA notes that many documents in the record supporting the proposed rule have been claimed as CBI and, therefore, EPA has not included these documents in the public record. To support the rulemaking, EPA is presenting certain information in aggregated form or, alternatively, is masking facility identities in order to preserve confidentiality claims. Further, the Agency has withheld from disclosure some data not claimed as CBI because release of this information could indirectly reveal information claimed to be confidential.

Facility-specific data, claimed as CBI, are available to the company that submitted the information. To ensure that EPA protects all CBI in accordance with EPA regulations, any requests for company-specific data should be submitted to EPA on company letterhead and signed by the official authorized to receive such data. The request must list the specific data requested and include the following statement, "I certify that EPA is authorized to transfer confidential business information submitted by my

company, and that I am authorized to receive it."

Supporting Documentation

Several key documents support the proposed regulations:

1. "Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Metal Products & Machinery Point Source Category" [EPA-821-B-00-005]: This document presents EPA's methodology and technical conclusions concerning the Metal Products & Machinery Point Source Category.
2. "Economic, Environmental, and Benefits Analysis of the Proposed Metal Products & Machinery Rule" [EPA-821-B-00-008]: This document presents the methodology employed to assess economic and environmental impacts of the proposed rule and the results of the analysis.
3. Cost-Effectiveness Analysis of the Proposed Effluent Limitations Guidelines and Standards for the Metal Products & Machinery Point Source Category" [EPA-821-B-00-007] This document analyzes the cost-effectiveness of the proposed regulation.
4. "Statistical Support Document for the Proposed Effluent Limitations Guidelines and Standards for the Metal Products & Machinery Industry" [EPA-821-B-00-006]: This document establishes the statistical methodology for developing numerical discharge limitations.

Major supporting documents are available in hard copy from the National Service Center for Environmental Publications (NSCEP), U.S. EPA/NSCEP, P.O. Box 42419, Cincinnati, Ohio, USA 45242-2419, (800) 490-9198, <http://www.epa.gov/ncepihom/>. You can obtain electronic copies of this preamble and rule as well as the technical and economic support documents for today's proposal at <http://www.epa.gov/ost/guide/mpm>.

Overview

The preamble describes the terms, acronyms, and abbreviations used in this notice; the background documents that support these proposed regulations; the legal authority of these rules; a summary of the proposal; background information; and the technical and economic methodologies used by the Agency to develop these regulations. This preamble also solicits comment and data on specific areas of interest.

In addition, this preamble proposes to update references in the relevant parts of the Code of Federal Regulations (CFR) to include the Metal Products & Machinery Point Source Category. References in 40 CFR would be updated

in the Electroplating (part 413), Metal Finishing (part 433), Plastic Molding and Forming (part 463), Metal Molding and Casting (part 464), Aluminum Forming (467), and Nonferrous Metals Forming and Metal Powders (part 471) effluent guidelines point source categories.

Table of Contents

- I. Legal Authority
- II. Background
 - A. Statutory Authorities
 - B. Existing Regulation for Metals Industries
 - C. 1995 Proposal for Phase I Sectors
 - D. Summary of Most Significant Changes from 1995 Proposal
- III. Scope of Proposal
- IV. Industry Description
- V. Summary of Data Collection Activities
 - A. Existing Data Sources
 - B. Survey Questionnaires
 - C. Wastewater Sampling and Site Visits
 - D. Industry Submitted Data
 - E. Summary of Public Participation
- VI. Industry Subcategorization
 - A. Methodology and Factors Considered for Basis of Subcategorization
 - B. Proposed Subcategories
 - C. General Description of Facilities in Each Subcategory
- VII. Water Use and Wastewater Characteristics
 - A. Wastewater Sources and Characteristics
 - B. Pollution Prevention, Recycle, Reuse, and Water Conservation Practices
- VIII. Development of Effluent Limitations Guidelines and Standards
 - A. Overview of Technology Options
 - B. Determination of Long-Term Averages, Variability Factors, and Limitations
- IX. Best Practicable Control Technology Currently Available (BPT)
 - A. General Metals Subcategory
 - B. Metal Finishing Job Shops Subcategory
 - C. Non-Chromium Anodizing Subcategory
 - D. Printed Wiring Board Subcategory
 - E. Steel Forming & Finishing Subcategory
 - F. Oily Wastes Subcategory
 - G. Railroad Line Maintenance Subcategory
 - H. Shipbuilding Dry Dock Subcategory
- X. Best Conventional Pollutant Control Technology (BCT)
 - A. July 9, 1986 BCT Methodology
 - B. Discussion of BCT Option for Metal-Bearing Wastewater
 - C. Discussion of BCT Option for Oily Wastewater
- XI. Best Available Technology Economically Achievable (BAT)
 - A. General Metals Subcategory
 - B. Metal Finishing Job Shops Subcategory
 - C. Non-Chromium Anodizing Subcategory
 - D. Printed Wiring Board Subcategory
 - E. Steel Forming & Finishing Subcategory
 - F. Oily Wastes Subcategory
 - G. Railroad Line Maintenance Subcategory
 - H. Shipbuilding Dry Dock Subcategory
- XII. Pretreatment Standards for Existing Sources (PSES)
 - A. Need for Pretreatment Standards
 - B. Overview of Technology Options for PSES
 - C. Overview of Low Flow Exclusions
 - D. General Metals Subcategory

- E. Metal Finishing Job Shops Subcategory
- F. Non-Chromium Anodizing Subcategory
- G. Printed Wiring Board Subcategory
- H. Steel Forming & Finishing Subcategory
- I. Oily Wastes Subcategory
- J. Railroad Line Maintenance Subcategory
- K. Shipbuilding Dry Dock Subcategory
- XIII. New Source Performance Standards (NSPS) and Pretreatment Standards for New Sources (PSNS)
 - A. NSPS for the General Metals Subcategory
 - B. PSNS for the General Metals Subcategory
 - C. NSPS for the Metal Finishing Job Shops Subcategory
 - D. PSNS for the Metal Finishing Job Shops Subcategory
 - E. NSPS for the Non-Chromium Anodizing Subcategory
 - F. PSNS for the Non-Chromium Anodizing Subcategory
 - G. NSPS for the Printed Wiring Board Subcategory
 - H. PSNS for the Printed Wiring Board Subcategory
 - I. NSPS for the Steel Forming and Finishing Subcategory
 - J. PSNS for the Steel Forming and Finishing Subcategory
 - K. NSPS for the Oily Wastes Subcategory
 - L. PSNS for the Oily Wastes Subcategory
 - M. NSPS for the Railroad Line Maintenance Subcategory
 - N. PSNS for the Railroad Line Maintenance Subcategory
 - O. NSPS for the Shipbuilding Dry Dock Subcategory
 - P. PSNS for the Shipbuilding Dry Dock Subcategory
- XIV. Issues Related to the Methodology Used to Determine POTW Performance
 - A. Assessment of Acceptable POTWs
 - B. Assessment of Acceptable Data
 - C. Assessment of Removals When Effluent Is Below the Analytical Method Minimum Level
- XV. Methodology for Estimating Costs & Pollutant Reductions
- XVI. Economic Impact and Social Cost Analysis
 - A. Introduction
 - B. Facility Level Impacts
 - C. Firm Level Impacts
 - D. Impacts on Governments
 - E. Community Level Impacts
 - F. Foreign Trade Impacts
 - G. Impacts on New Facilities
 - H. Social Costs
- XVII. Cost Effectiveness Analysis
 - A. Methodology
 - B. Cost-Effectiveness Analysis for Indirect Dischargers
 - C. Cost-Effectiveness Analysis for Direct Dischargers
- XVIII. Non-Water Quality Environmental Impacts
 - A. Air Pollution
 - B. Solid Waste
 - C. Energy Requirements
- XIX. Water Quality, Sewage Sludge, and Other Environmental Impacts
 - A. Introduction
 - B. Beneficial Impacts of the MP&M Proposed Rule
- XX. Benefit Analysis

- A. Overview of Benefits
 - B. Reduced Human Health Risk
 - C. Ecological, Recreational, and Nonuser Benefits
 - D. Productivity Changes: Cleaner Sewage Sludge (Biosolids)
 - E. Total Estimated Benefits of the Proposed MP&M Rule
 - F. Benefit-Cost Comparison
 - XXI. Regulatory Implementation
 - A. Compliance Dates
 - B. Implementation of Limitations and Standards
 - C. Monitoring Flexibility
 - D. Pollution Prevention Alternative for the Metal Finishing Job Shops Subcategory
 - E. Upset and Bypass Provisions
 - F. Variances and Modifications
 - G. Relationship of Effluent Limitations and Pretreatment Standards to NPDES Permits and Local Limits
 - H. Best Management Practices
 - XXII. Related Acts of Congress, Executive Orders, and Agency Initiatives
 - A. Paperwork Reduction Act
 - B. Unfunded Mandates Reform Act (UMRA)
 - C. Regulatory Flexibility Act (RFA) as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)
 - D. Executive Order 12866: Regulatory Planning and Review
 - E. Executive Order 13132: Federalism
 - F. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
 - G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
 - H. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments
 - I. National Technology Transfer and Advancement Act
 - J. Plain Language Directive
 - K. Executive Order 13158: Marine Protected Areas
 - L. Coastal Zone Act Reauthorization Amendments (CZARA)
 - XXIII. Solicitation of Data and Comments
 - XXIV. Guidelines for Submission of Analytical Data
 - A. Types of Data Requested
 - B. Analytes Requested
 - C. Quality Assurance/ Quality Control (QA/QC) Requirements
- Appendix A to the Preamble: Abbreviations, Acronyms, and Other Terms Used in This Document.

I. Legal Authority

EPA is proposing this regulation under the authorities of sections 301, 304, 306, 307, 308, 402 and 501 of the Clean Water Act, 33 U.S.C. Sections 1311, 1314, 1316, 1317, 1318, 1342 and 1361 and under authority of the Pollution Prevention Act of 1990 (PPA), 42 U.S.C. 13101 *et seq.*, Pub L. 101-508, November 5, 1990.

II. Background

A. Statutory Authorities

1. Clean Water Act

Congress adopted the Clean Water Act (CWA) to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters” (Section 101(a), 33 U.S.C. 1251(a)). To achieve this goal, the CWA prohibits the discharge of pollutants into navigable waters except in compliance with the statute. The CWA confronts the problem of water pollution on a number of different fronts. Its primary reliance, however, is on establishing restrictions on the types and amounts of pollutants discharged from various industrial, commercial, and public sources of wastewater.

Congress recognized that regulating only those sources that discharge effluent directly into the nation’s waters would not be sufficient to achieve the CWA’s goals. Consequently, the CWA requires EPA to promulgate nationally applicable pretreatment standards which restrict pollutant discharges for those who discharge wastewater indirectly through sewers flowing to publicly-owned treatment works (POTWs) (Sections 307(b) and (c), 33 U.S.C. 1317(b) and (c)). EPA establishes national pretreatment standards for those pollutants in wastewater from indirect dischargers which may pass through or interfere with POTW operations. Generally, the Agency develops pretreatment standards to ensure that wastewater from direct and indirect industrial dischargers are subject to similar levels of treatment. In addition, EPA requires POTWs to implement local treatment limits applicable to their industrial indirect dischargers to satisfy any local requirements (40 CFR 403.5).

Direct dischargers must comply with effluent limitations in National Pollutant Discharge Elimination System (“NPDES”) permits; indirect dischargers must comply with pretreatment standards. EPA establishes these limitations and standards by regulation for categories of industrial dischargers and bases them on the degree of control that can be achieved using various levels of pollution control technology.

a. Best Practicable Control Technology Currently Available (BPT)—Sec. 304(b)(1) of the CWA

In the guidelines for an industry category, EPA defines BPT effluent limits for conventional, toxic,¹ and non-

¹ In the initial stages of EPA CWA regulation, EPA efforts emphasized the achievement of BPT limitations for control of the “classical” pollutants

conventional pollutants. In specifying BPT, EPA looks at a number of factors. EPA first considers the cost of achieving effluent reductions in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Agency deems appropriate (CWA 304(b)(1)(B)). Traditionally, EPA establishes BPT effluent limitations based on the average of the best performances of facilities within the industry of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, EPA may require higher levels of control than currently in place in an industrial category if the Agency determines that the technology can be practically applied.

b. Best Available Technology Economically Achievable (BAT)—Sec. 304(b)(2) of the CWA

In general, BAT effluent limitations guidelines represent the best existing economically achievable performance of direct discharging plants in the industrial subcategory or category. The factors considered in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the processes employed, engineering aspects of the control technology, potential process changes, non-water quality environmental impacts (including energy requirements), and such factors as the Administrator deems appropriate. The Agency retains considerable discretion in assigning the weight to be accorded to these factors. An additional statutory factor considered in setting BAT is economic achievability. Generally, EPA determines the economic achievability on the basis of the total cost to the industrial subcategory and the overall effect of the rule on the industry's financial health. The Agency may base BAT limitations upon effluent reductions attainable through changes in a facility's processes and operations. As with BPT, where existing performance is uniformly inadequate,

(e.g., TSS, pH, BOD₅). However, nothing on the face of the statute explicitly restricted BPT limitation to such pollutants. Following passage of the Clean Water Act of 1977 with its requirement for point sources to achieve best available technology limitations to control discharges of toxic pollutants, EPA shifted its focus to address the listed priority toxic pollutants under the guidelines program. BPT guidelines continue to include limitations to address all pollutants.

EPA may base BAT upon technology transferred from a different subcategory within an industry or from another industrial category. In addition, the Agency may base BAT upon process changes or internal controls, even when these technologies are not common industry practice.

c. Best Conventional Pollutant Control Technology (BCT)—Sec. 304(b)(4) of the CWA

The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with BCT technology for discharges from existing industrial point sources. BCT is not an additional limitation, but replaces Best Available Technology (BAT) for control of conventional pollutants. In addition to other factors specified in Section 304(b)(4)(B), the CWA requires that EPA establish BCT limitations after consideration of a two-part "cost-reasonableness" test. EPA explained its methodology for the development of BCT limitations in July 1986 (51 FR 24974).

Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD₅), total suspended solids (TSS), fecal coliform, pH, and any additional pollutants defined by the Administrator as conventional. The Administrator designated oil and grease as an additional conventional pollutant on July 30, 1979 (44 FR 44501).

d. New Source Performance Standards (NSPS)—Sec. 306 of the CWA

NSPS reflect effluent reductions that are achievable based on the best available demonstrated control technology. New facilities have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS should represent the greatest degree of effluent reduction attainable through the application of the best available demonstrated control technology for all pollutants (*i.e.*, conventional, non-conventional, and priority pollutants). In establishing NSPS, the CWA directs EPA to take into consideration the cost of achieving the effluent reduction and any non-water quality environmental impacts and energy requirements.

e. Pretreatment Standards for Existing Sources (PSES)—Sec. 307(b) of the CWA

PSES are designed to prevent the discharge of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of publicly owned treatment works

(POTWs). The CWA authorizes EPA to establish pretreatment standards for pollutants that pass through POTWs or interfere with treatment processes or sludge disposal methods at POTWs. Pretreatment standards are technology-based and analogous to BAT effluent limitations guidelines.

The General Pretreatment Regulations, which set forth the framework for implementing categorical pretreatment standards, are found at 40 CFR part 403. Those regulations contain a definition of pass through that addresses localized rather than national instances of pass through and establish pretreatment standards that apply to all non-domestic dischargers. See 52 FR 1586, January 14, 1987.

f. Pretreatment Standards for New Sources (PSNS)—Sec. 307(b) of the CWA

Like PSES, PSNS are designed to prevent the discharges of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of POTWs. New indirect dischargers have the opportunity to incorporate into their plants the best available demonstrated technologies. The Agency considers the same factors in promulgating PSNS as it considers in promulgating NSPS.

2. Pollution Prevention Act

The Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101 *et seq.*, Pub. L. 101-508, November 5, 1990) makes pollution prevention the national policy of the United States. The PPA identifies an environmental management hierarchy in which pollution "should be prevented or reduced whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or release into the environment should be employed only as a last resort" (42 U.S.C. 13103). In short, preventing pollution before it is created is preferable to trying to manage, treat or dispose of it after it is created. According to the PPA, source reduction reduces the generation and release of hazardous substances, pollutants, wastes, contaminants or residuals at the source, usually within a process. The term source reduction " * * * includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory

control. The term 'source reduction' does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to or necessary for the production of a product or the providing of a service." In effect, source reduction means reducing the amount of a pollutant that enters a waste stream or that is otherwise released into the environment prior to out-of-process recycling, treatment, or disposal.

B. Existing Regulation for Metals Industries

EPA has established effluent guidelines regulations for thirteen industrial categories which may perform operations that are sometimes found in MP&M facilities. These effluent guidelines are:

- Electroplating (40 CFR part 413);
- Iron and Steel Manufacturing (40 CFR part 420);
- Nonferrous Metals Manufacturing (40 CFR part 421);
- Ferroalloy Manufacturing (40 CFR part 424);
- Metal Finishing (40 CFR part 433);
- Battery Manufacturing (40 CFR part 461);
- Metal Molding & Casting (40 CFR part 464);
- Coil Coating (40 CFR part 465);
- Porcelain Enameling (40 CFR part 466);
- Aluminum Forming (40 CFR part 467);
- Copper Forming (40 CFR part 468);
- Electrical and Electronic Components (40 CFR part 469); and

- Nonferrous Metals Forming and Metal Powders (40 CFR part 471).

In 1986, the Agency reviewed coverage of these regulations and identified a significant number of metals processing facilities discharging wastewater that these 13 regulations did not cover. Based on this review, EPA performed a more detailed analysis of these facilities that were not subject to national effluent guidelines and pretreatment standards. This analysis identified the discharge of significant amounts of pollutants. This analysis resulted in the decision to develop national limitations and standards for the "Machinery Manufacturing and Rebuilding" (MM&R) point source category. In 1992, EPA changed the name of the category to "Metal Products and Machinery" (MP&M) to clarify coverage of the category (57 FR 19748).

EPA recognizes that in some cases unit operations performed in industries covered by the existing effluent guidelines are the same as unit operations performed at MP&M facilities. In general, when unit operations and their associated wastewater discharges are already covered by an existing effluent guideline, they will remain covered under that effluent guideline. (See § 438.1(b)). However, for the existing Electroplating (40 CFR 413) and Metal Finishing (40 CFR 433) effluent guidelines some facilities will be covered by this proposal. EPA is proposing to replace the existing Electroplating (40 CFR 413) and Metal Finishing (40 CFR 433) effluent guidelines with the MP&M regulations for all facilities in the Printed Wiring

Board subcategory (see proposed rule § 438.40) and the Metal Finishing Job Shops subcategory (see proposed rule § 438.20). (See Table II.B-1 for clarification for details and Section VI.C for a discussion of subcategory-specific applicability).

When a facility covered by an existing metals effluent guidelines (other than Electroplating or Metal Finishing) discharges wastewater from unit operations not covered under that existing metals guideline but covered under MP&M, the facility will need to comply with both regulations. (See § 438.1(c)). In those cases, the permit writer or control authority (e.g., Publicly Owned Treatment Works) will combine the limitations using an approach that proportions the limitations based on the different in-scope production levels (for production-based standards) or wastewater flows. POTWs refer to this approach as the "combined wastestream formula" (40 CFR 403.6(e)), while NPDES permit writers refer to it as the "building block approach." Permit writers and local control authorities currently issue permits and control mechanisms for many facilities in other effluent guidelines categories where overlaps with more than one effluent limitation guidelines regulation occur (e.g., Organic Chemicals, Plastics, and Synthetic Fibers; Pesticide Manufacturing; Pesticide Formulating, Packaging and Repackaging; and Pharmaceutical Manufacturing). See Sections III and VI.C of this preamble for additional discussion of applicability.

TABLE II.B-1.—CLARIFICATION OF COVERAGE BY MP&M SUBCATEGORY

Subcategory	Proposing to continue to cover under 40 CFR Part 413 (Electroplating)	Proposing to continue to cover under 40 CFR Part 433 (Metal Finishing)	Proposing to cover under 40 CFR Part 438 (Metal Products & Machinery)
General Metals	Existing facilities that are currently covered by 413 AND are indirect dischargers that introduce less than or equal to 1 million gallons per year into a POTW.	Existing facilities that are currently covered (or new facilities that would be covered) by 433 AND are indirect dischargers that introduce less than or equal to 1 million gallons per year into a POTW.	All new and existing direct dischargers in this subcategory regardless of annual wastewater discharge volume and all new and existing indirect dischargers in this subcategory with annual wastewater discharges greater than 1 million gallons per year. (See § 438.10).
Metal Finishing Job Shops	none (see non-chromium anodizing).	none (see non-chromium anodizing).	All new and existing direct and indirect discharges under this subcategory. These facilities would no longer be covered by 413 or 433. (See § 438.20).

TABLE II.B-1.—CLARIFICATION OF COVERAGE BY MP&M SUBCATEGORY—Continued

Subcategory	Proposing to continue to cover under 40 CFR Part 413 (Electroplating)	Proposing to continue to cover under 40 CFR Part 433 (Metal Finishing)	Proposing to cover under 40 CFR Part 438 (Metal Products & Machinery)
Non-Chromium Anodizers Note: Facilities that perform anodizing with chromium or with the use of dichromate sealants (or commingle their non-chromium anodizing process wastewater with wastewater from other MP&M subcategories) will be covered by 40 CFR 438.	Existing indirect dischargers that are currently covered by 413 AND that only perform non-chromium anodizing (or do not commingle their non-chromium anodizing wastewater with other process wastewater for discharge).	New and existing indirect dischargers (not covered by 413) that only perform non-chromium anodizing (or do not commingle their non-chromium anodizing wastewater with other process wastewater for discharge).	Existing and new direct dischargers that only perform non-chromium anodizing (or do not commingle their non-chromium anodizing wastewater with other process wastewater for discharge). (See § 438.30).
Printed Wiring Board (Printed Circuit Board).	None	None	All new and existing direct and indirect dischargers under this subcategory. These facilities would no longer be covered by 413 or 433. (See § 438.40).
Steel Forming & Finishing	N/A	N/A	All new and existing direct and indirect discharges under this subcategory as described. (See § 438.50).
Oily Waste	N/A	N/A	All new and existing direct and indirect dischargers under this subcategory as described. (See § 438.60) (This subcategory excludes new and existing indirect dischargers that introduce less than or equal to 2 MGy into a POTW. Facilities under the cut-off are not and will not be covered by national categorical regulations).
Railroad Line Maintenance	N/A	N/A	All new and existing direct dischargers under this subcategory as described. (See § 438.70) There are no national categorical pretreatment standards for these facilities.
Shipbuilding Dry Docks	N/A	N/A	All new and existing direct dischargers under this subcategory as described. (See § 438.80) There are no national categorical pretreatment standards for these facilities.

EPA does not intend the preceding table to be exhaustive, but rather it provides a guide for readers regarding the clarification of the proposed applicability to the Electroplating, Metal Finishing, and Metal Products & Machinery effluent guidelines. In order to determine whether EPA is proposing to regulate a particular facility by this action, please carefully examine the applicability criteria detailed in the codified text of this proposed rule accompanying today's preamble.

C. 1995 Proposal for Phase I Sectors

On May 30, 1995, EPA published a proposal entitled, "Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Metal Products and Machinery" (60 FR 28210). Throughout this preamble, EPA refers to this 1995 proposal as the "Phase I" or the "1995" proposal for the

Metal Products and Machinery industry. EPA initially divided the industry into two phases based on industrial sector as the Agency believed that would make the regulation more manageable. The Phase I proposal included the following industry sectors: Aerospace; Aircraft; Electronic Equipment; Hardware; Mobile Industrial Equipment; Ordnance; and Stationary Industrial Equipment. At that time, EPA planned to propose a rule for the Phase II sectors approximately three years after the MP&M Phase I proposal.

EPA received over 4,000 pages of public comment on the Phase I proposal. One area where commenters from all stakeholder groups (*i.e.*, industry, environmental groups, regulators) were in agreement was that EPA should not divide the industry into two separate regulations. Commenters raised concerns regarding the regulation

of similar facilities with different compliance schedules and potentially different limitations solely based on whether they were in a Phase I or Phase II MP&M industrial sector. Furthermore, many facilities performed work in multiple sectors. In such cases, permit writers and control authorities (*e.g.*, POTWs) would need to decide which MP&M rule (Phase I or II) applied to a facility.

Based on these comments, EPA decided to combine the two phases of the regulation into one proposal—today's proposal. Today's proposal will completely replace the 1995 proposal. Under the 304(m) decree as amended, these MP&M rules are to be promulgated in December 2002. EPA developed today's proposal using data from both the Phase I and II data collection efforts. (See Section V for discussion on MP&M data collection efforts). In the public

record for the final MP&M regulation, EPA will respond to comments from the 1995 Phase I proposal as well as today's proposal. Therefore, comments submitted on the Phase I rule do not need to be resubmitted in response to this proposal. In addition, compliance deadlines proposed in the 1995 Phase I proposal would obviously no longer apply.

D. Summary of Most Significant Changes from 1995 Proposal

In addition to the merging of the Phase I and Phase II industry sectors under one proposed rule, as discussed in Section II.C. above, there were several areas of comments from the 1995 proposal that EPA attempted to address in today's proposed rule.

Use of Aluminum and Iron as Indicator Parameters

In the 1995 proposal, EPA proposed pretreatment standards for existing sources (PSES) for seven metals and cyanide as well as oil & grease. Aluminum and iron were two of the seven metals with numerical pretreatment standards. As discussed in the Phase I preamble (60 FR 28228), EPA intended to regulate aluminum and iron as indicator metals for removal of non-regulated metals that may be processed at MP&M sites. Due to the fact that the optimal pH levels for the removal of aluminum (pH = 7.5–8) and iron (pH = 10.5) represent the end points of the pH range for the removal of most metals that EPA expected to be in MP&M wastewater, the Agency concluded that the removal of aluminum and iron would indicate effective removal of other metal types. EPA received many comments from various stakeholder groups, including Publicly Owned Treatment Works (POTWs) on this issue. The comments from POTWs indicated that in addition to MP&M sites using aluminum and iron as treatment chemicals, POTWs also use coagulants and flocculation aids containing these metals for treatment. Many POTWs considered it desirable to receive discharges containing aluminum and iron as it may reduce their treatment chemical costs. Therefore, EPA has decided not to propose pretreatment standards for aluminum and iron from indirect discharging MP&M facilities in today's combined MP&M proposal. However, EPA is proposing aluminum limitations for facilities in one subcategory (*i.e.*, Non-Chromium Anodizing) that discharge directly into the nation's surface waters (see Section VI for a discussion on subcategorization).

Use of Oil and Grease as an Indicator Parameter

EPA also received many comments on the Phase I proposal regarding regulation of another pollutant, oil & grease (O&G), as an indicator parameter. In an effort to reduce the burden of analytical monitoring for organic pollutants on the Phase I MP&M facilities, EPA chose to propose the use of O&G as an indicator parameter for organic pollutants. EPA proposed a limit (daily maximum of 35 mg/L and a monthly average of 17 mg/L) that demonstrated good removals of organic pollutants in MP&M wastewater. As discussed in the preamble of the 1995 proposal (60 FR 28231), EPA identified several organic pollutants (2-methylnaphthalene, 2-propanone, n-octadecane, and n-tetradecane) that would "pass through" a POTW (see Section XII for a discussion of POTW pass through). EPA stated that "these organic pollutants are more likely to partition to the oily phase than the water phase, thus EPA believed that the treatment and removal of oil and grease in wastewater will also result in significant removals of these pollutants." Many commenters stated that the pretreatment standard proposed for O&G was too stringent. They commented that EPA typically does not establish pretreatment standards for conventional pollutants such as O&G and that local POTWs are in the best position to establish standards for O&G, where necessary, taking into account POTW design and current O&G loading and that the typical local limits for O&G are between 100–200 mg/L.

Based on these comments, EPA expanded its wastewater sampling and analysis program to include a variety of potential organic pollutant indicators. EPA investigated the correlation of organic pollutant concentrations and removals at MP&M sites with the following parameters: Oil & Grease (as Hexane Extractable Material (HEM)), Total Organic Carbon (TOC), Chemical Oxygen Demand (COD), 5-Day Biochemical Oxygen Demand (BOD₅), Total Petroleum Hydrocarbon (as Silica Gel Treated-Hexane Extractable Material (SGT-HEM)), and Total Recoverable Phenolics. EPA determined TOC to be the best correlation for removal of organic pollutants from MP&M wastewater.

To determine which parameter best indicated the amount of organic pollutants in an MP&M wastestream, EPA researched the analytical methods for each parameter to determine what organic constituents the method measures, how the method measures

them, and the limitations of the method. Because sampling at MP&M facilities generally lasted five days, EPA did not have enough data available to statistically establish a correlation on a site level. Therefore, EPA grouped all of the data from EPA sampling at MP&M facilities into the following organic-pollutant-bearing wastestream categories that fed sampled treatment systems: machining and grinding, washing and maintenance, wastewater expected to have low concentrations of organic compounds, and oily wastewater from shipbuilding dry docks. The Agency chose to group the wastestreams in this manner in order to determine if a particular organic indicator parameter was more appropriate for different types of wastewater. That is, machining and grinding wastewater tended to have more concentrated organic constituents while wastewater from washing and maintenance was more dilute. EPA also identified other unit operations (apart from washing and maintenance) that resulted in wastewater with low concentrations of organic constituents. And, EPA chose to analyze wastewater from shipbuilding dry docks separately because of the type of treatment in place. Shipbuilding dry docks tend to treat their wastewater with dissolved air flotation (DAF); therefore, the Agency analyzed the data from these facilities in order to determine the best organic indicator parameter for these treatment systems.

For each wastewater type and its associated wastewater treatment system, EPA characterized the composition of organic pollutants in all of the influent samples, in all of the effluent samples, and the total samples (influent, effluent, and intermediate sampling points) associated with the treatment system. EPA studied the correlation of the concentration of each indicator parameter noted above to the sum of the concentrations of the organic pollutants by calculating the Pearson and Spearman Rank correlation coefficients and comparing the coefficients of each parameter against each other. Additionally, EPA compared the general removal of the sum of organic pollutant compounds with the removal of each indicator parameter (see the Technical Development Document for a detailed discussion of these analyses).

EPA determined TOC to be the best overall indicator parameter for the evaluated MP&M wastestreams because this analysis measures all types of organic compounds. Total recoverable phenolics, O&G (as HEM), Total Petroleum Hydrocarbons (as SGT-HEM), and BOD₅ analyses only measure

specific organic components so they would not measure all possible organic compounds in an effluent stream.

In addition to expanding its sampling program, EPA considered a variety of approaches to address the comments on the use of O&G as an indicator for organic pollutants. EPA considered the use of a Total Organics list or an organics management plan (similar to the Total Toxic Organics (TTO) list and solvent management plan used in the Metal Finishing effluent guidelines (40 CFR 433)) as well as allowing facilities to choose from a list of possible indicator pollutants (where they would demonstrate a correlation to their wastewater) or to choose to monitor for the specific organic pollutants themselves. EPA shared these ideas with small entity representatives during the SBREFA process (see Section XXII.C for a discussion on the SBREFA process) and with stakeholders during various public meetings and industry conferences. (See Section V.E for a discussion on EPA's public outreach efforts).

EPA has decided to propose three alternatives to allow for maximum flexibility while ensuring reductions in the amount of organic pollutants discharged from MP&M facilities. EPA is proposing to require MP&M facilities within the scope of this rule to either: (1) Meet a numerical limit for the total sum of a list of specific organic pollutants (similar to the TTO parameter used in the Metal Finishing effluent guidelines); (2) meet a numerical limit for the specified indicator parameter; or (3) develop and certify the implementation of an organics management plan. (See Section XXI.C.2 for a discussion on regulatory implementation and proposed monitoring flexibility).

Variability of MP&M Process Wastewater Discharges

EPA also revised its analytical wastewater sampling program to address two other issues raised by commenters in response to the 1995 proposal. First, commenters stated that EPA's analytical data did not accurately reflect the variability in the wastewater flow and pollutant concentration experienced over time at MP&M sites. More specifically, metal finishing and electroplating job shops stated that EPA did not account for the variability of the metal types and products processed at their facilities; and therefore, EPA's proposed numerical limits did not accurately reflect pollutant concentrations achievable by these types of facilities (see Section VI.C.2. for a description of metal finishing job

shops). EPA has addressed this by performing specific sampling targeted to assess the wastewater variability at metal finishing and electroplating job shops. EPA sampled raw wastewater from a variety of unit operations as well as wastewater treatment systems at three job shops for five days each. After a period of a few months, the Agency then returned to each facility a second and/or a third time for three days of analytical wastewater sampling. In addition, when determining proposed limits for the Metal Finishing Job Shops subcategory, EPA, when possible, only used data collected from metal finishing and electroplating facilities. However, EPA had to transfer data from the General Metals subcategory for several pollutants that are being proposed in the Metal Finishing Job Shops subcategory. Based on this approach, the limits for facilities in the Metal Finishing Job Shop subcategory include increased variability factors as compared to the General Metals subcategory (*i.e.*, the subcategory that EPA considers to be the most similar in terms of raw wastewater characterization).

Second, commenters stated the variability factors that EPA used in the development of limitations were relatively small. Commenters expressed their view that EPA's variability factors did not reflect the variations in raw wastewater pollutant concentrations nor the variations in the effectiveness of treatment technologies (particularly in the case of cyanide). Section VIII.B of today's preamble discusses the statistical methodology used for developing variability factors. In an effort to ensure that the variability factors represent the variability found in MP&M wastewater, EPA performed 44 sampling episodes during post-1995 proposal data collection in addition to the 27 sampling episodes performed during the Phase I data collection effort. EPA also specifically included sampling of 20 cyanide destruction systems.

In addition, the Agency has collected long-term effluent data from facility Compliance Reports and Discharge Monitoring Reports in an effort to perform a "real world" check on the achievability of today's proposed limits. This data is available for review in the public record for today's proposal (see Section 6.6.1 of the public record). Indirect dischargers file compliance monitoring reports with their control authority (*e.g.*, POTW) at least twice per year as required under the General Pretreatment Standards (40 CFR part 403) while direct dischargers file discharge monitoring reports with their permitting authority at least once per year. The Agency received these reports

from 14 well-operated BAT facilities whose analytical data EPA used in establishing limitations. EPA sent letters to nine facilities requesting this data. In addition, five sites provided EPA with this data during site visits or sampling episodes or as part of their questionnaire response. Because this data is not in a form that allows direct use for calculating limits or for comparison to the proposed limits, EPA was not able to use this data in setting or evaluating the compliance aspects of the limits and standards in today's proposal. However, following proposal, EPA will reformulate and evaluate this long-term effluent monitoring data in relation to the proposed limits. In cases where EPA finds a facility in its costing database that was used to set the numerical limits and is not in compliance with the proposed pollutant limitations, EPA will reassess the achievability of these limits by a well-operated BAT system. When a system is not achieving the proposed limits consistently it may be because either the system is not achieving the projected long-term average (LTA) or the system has higher variability than EPA determined using its standard methodology. EPA requests comment on its methodology for determining LTAs and variability factors. In cases where EPA determines that improved system operation will allow the limits to be consistently achieved it will include additional treatment costs for the facility in its cost estimations for the final rule where EPA has not already done so. EPA concludes, in following the approach described above, that it will address the concerns of commenters on the Phase I proposed rule related to the achievability of the numerical limits by well operated and economically achievable treatment systems. EPA requests comment on this method of performing a "real world" check on the achievability of its proposed limits.

Finally, as compared to the 1995 proposed limits, today's proposed numerical limits for total cyanide have increased almost one order of magnitude from 0.03 mg/L for the daily maximum and 0.02 for the monthly average to 0.21 and 0.12, respectively. This increase is largely due to increased variability factors.

Low Discharge Flow Exclusion

Another significant change from the 1995 proposal is EPA's proposed low wastewater discharge flow exclusion ("low flow cutoff") for indirect dischargers. In the 1995 proposed rule, EPA set a low flow cutoff at one million gallons per year (1 MGY) for all indirect

discharging facilities included in the Phase I sectors. This meant that EPA proposed to exclude, from the MP&M pretreatment standards, facilities discharging less than 1 MGY to a POTW. The Agency included the low flow cutoff to reduce the potentially large burden on POTWs related to issuing permits or other control mechanisms to thousands of the smallest MP&M Phase I sector facilities. EPA received many comments on the level of the proposed flow cutoff. Based on these comments and the recommendations of the SBREFA panel (see Section XXII.C on the SBREFA process), EPA analyzed a range of flow cutoffs for indirect dischargers ranging from no flow cutoff to 6.25 million gallons per year. EPA notes that at 6.25 million gallons per year, the General Pretreatment Standards (40 CFR part 403) classify indirect discharging facilities as "Significant Industrial Users" (SIUs). Under the General Pretreatment Standards, control authorities (*e.g.*, POTWs) must issue permits or other control mechanisms to SIUs and, therefore, no POTW burden reductions are realized above a flow cutoff of 6.25 MGY. (However, there may be some minimal increase in burden for modifying permits or control mechanisms).

EPA estimates that there are a total of 89,000 facilities within the scope of the proposed rule. Many of these facilities are small facilities and may be contributing minimal pollutant loadings to the environment. A low flow exclusion allows regulatory authorities to focus attention on those facilities with significant discharges. This may also improve the cost-effectiveness of the rule. In developing today's proposal, EPA considered POTW burden, costs, pollutant removals, and economic impacts of the various flow cutoffs.

Unlike the 1995 proposal, EPA is now proposing to subcategorize (*i.e.*, subdivide) the MP&M category (see Section VI of this preamble for a discussion on subcategorization of the industry). Therefore, EPA has analyzed the various low flow cutoffs by subcategory, noting in particular which subcategories are not currently covered under existing pretreatment standards. When existing pretreatment standards already cover all facilities in a particular subcategory, POTWs will not be relieved of their administrative burden, regardless of whether or not a low flow exclusion exists in the MP&M pretreatment standards. But other factors, such as a disproportionate economic impact have been considered.

The combination of subcategorization of the industry, current coverage under

existing pretreatment standards, and analysis of a range of low flow cutoffs has led EPA to propose different levels for the low flow exclusion for indirect dischargers in various subcategories. For example, EPA is proposing the 1 MGY cutoff for indirect dischargers in the General Metals subcategory, but is proposing no flow cutoff for indirect dischargers in the Printed Wiring Board subcategory (see Section VI.C. for descriptions of the proposed subcategories). This difference is partially due to the fact that under the Electroplating and Metal Finishing pretreatment standards (40 CFR parts 413 and 433), EPA already regulates (thus it already requires POTWs to issue control mechanisms for) all indirect discharging facilities in the proposed Printed Wiring Board subcategory (approximately 620 facilities). In addition, EPA does not project any severe or moderate economic impacts for the small estimated number of printed wiring board facilities (52) that would be eligible for a low flow cutoff of 1 MGY. In contrast, EPA has not previously established pretreatment standards for approximately 75 percent of the indirect discharging facilities in the proposed General Metals subcategory (approximately 26,000 total facilities). Approximately 23,000 indirect dischargers in the proposed General Metals Subcategory discharge less than 1 MGY. If EPA did not exclude these facilities, the number of permit issuances that POTWs are responsible for would increase significantly. There are approximately 30,000 industrial users currently covered nationally by existing pretreatment standards for all effluent guidelines. Low flow exclusions being proposed for the General Metals and Oily Wastes subcategories, POTWs (or other control authorities) would have to issue an additional 51,000 permits/control mechanisms. EPA discusses further the rationale for proposing a low flow cutoff exclusion for certain subcategories in Section XII.

Mass-Based v. Concentration-Based Limits

EPA also received many comments on the issue of mass-based versus concentration-based limits. In the 1995 proposal, EPA proposed concentration-based limits with the requirement that control authorities (*e.g.*, POTWs) implement them as mass-based limits. EPA notes that under the NPDES permit program, the Agency already requires permit writers to implement effluent limitations guidelines as mass-based limits whenever feasible (40 CFR 122.45(f)). EPA proposed requiring this conversion to mass-based limits because

the Agency believed that it was necessary to ensure the use of water conservation and pollution prevention practices similar to those that were part of EPA's selected option (60 FR 28230). EPA expected permit writers and control authorities to use historical flow as a basis for the conversion to mass-based limits for facilities that demonstrated good water conservation practices. However, for facilities that did not have good water conservation in place, EPA provided detailed guidance to permit writers and control authorities in the Technical Development Document (TDD) for the 1995 proposal. The TDD included information on a full range of water use levels (in gallons/sq.ft.) for a large variety of MP&M operations as well as guidance on how permit writers and control authorities could determine if a facility was using good water conservation practices.

EPA received comments on the administrative burden on POTWs associated with implementation of mass-based limits. The commenters stated that the burden was largely due to the fact that most MP&M facilities do not collect production information on a wastestream-by-wastestream basis. POTWs have continued to voice these concerns at recent public stakeholder meetings. To address this issue, EPA collected additional MP&M unit operation-specific information on pollution prevention practices, water use, and wastewater generation in the data collection efforts that followed the Phase I proposal.

In today's proposal, EPA is again proposing concentration-based limits (for all but one subcategory) and is providing detailed information on water use levels for specific unit operations in the Technical Development Document. However, the Agency is no longer proposing to require control authorities (*e.g.*, POTWs) or permit writers to implement the limits on a mass basis. Instead EPA is proposing to authorize control authorities and permit writers to decide when it is most appropriate to implement mass-based limits. EPA believes that this approach will reduce implementation burden on POTWs and will result in increased use of water conservation practices at the facilities where POTWs and permit writers think it is most needed. EPA believes that MP&M facilities that use the best pollution prevention and water conservation practices may request that the control authority or permit writer use mass-based limits in their permits or other control mechanisms. (See Section XXI.B for a discussion on regulatory implementation).

III. Scope of Proposal

Today's proposed effluent guideline applies to process wastewater discharges from existing or new industrial sites engaged in manufacturing, rebuilding, or maintenance of metal parts, products or machines to be used in one of the following industrial sectors:

- Aerospace;
- Aircraft;
- Bus and Truck;
- Electronic Equipment;
- Hardware;
- Household Equipment;
- Instruments;
- Job Shops;
- Mobile Industrial Equipment;
- Motor Vehicle;
- Office Machine;
- Ordnance;
- Precious Metals and Jewelry;
- Printed Wiring Boards;
- Railroad;
- Ships and Boats;
- Stationary Industrial Equipment;

and
• Miscellaneous Metal Products.

EPA has identified these eighteen industrial sectors in the MP&M category; these sectors manufacture, maintain and rebuild metal products under more than 200 different SIC codes. See Appendix A of today's proposed rule for a description of typical products within these eighteen MP&M industrial sectors. Although EPA is using these 18 industrial sectors to generally describe the scope of today's proposal, the Agency notes that it is not using these industrial sectors to subcategorize (or subdivide) the regulations for the industry. EPA's analysis to date suggests that the industrial sectors do not correlate well with the types of waste generated, and many facilities perform operations covered by multiple sectors. Instead, EPA is proposing to define subcategories based on unit operations performed and the nature of the waste generated (see Section VI of today's notice for a discussions on subcategorization and subcategory-specific applicability).

EPA does not intend to include maintenance or repair of metal parts, products, or machines that occur only as ancillary activities at facilities that it did not include in the 18 industrial sectors. (See § 438.1(d)). EPA believes that these ancillary repair and maintenance activities would typically generate only small quantities of wastewater. In most cases, these periodic repair and maintenance activities at facilities not in one of the 18 industrial sectors would comprise only a very small portion of

the total wastewater flow at the facility. The Agency believes local limits will be adequate to address these discharges for indirect dischargers and that permit writers can establish limits using Best Professional Judgement (BPJ) to regulate these ancillary waste streams for direct dischargers. Permit writers should consult the effluent limitations guidelines and standards for the primary category of such a facility (See 40 CFR Chapter I, Subchapter N for all existing effluent limitations guidelines and standards). As an example, EPA does not intend for the MP&M proposal to include process wastewater discharges from an on-site machine or maintenance shop at a facility engaged in the manufacture of organic chemicals when the facility operates that shop to maintain the equipment related to manufacturing their products (*i.e.*, organic chemicals). As discussed above, these wastewaters can be regulated through local limits or through BPJ using the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) regulations. Alternatively, since aircraft is an in-scope MP&M industrial sector, EPA is proposing to include process wastewater discharges from activities related to maintaining or repairing aircraft or other related (metal) equipment (*e.g.*, deicing vehicles) at airports.

EPA also intends to cover wastewater from MP&M operations related to maintenance and repair of metal products, parts, and machinery at military installations. For example, this proposal includes wastewater generated from the maintenance and repair of aircraft, cars, trucks, buses, tanks (or other armor personnel carriers), and industrial equipment—all of which are commonly performed at military installations.

Today's proposal only covers process wastewater generated at MP&M facilities. EPA is not covering non-process wastewater which includes sanitary wastewater, non-contact cooling water, and storm water. EPA has characterized typical MP&M unit operations as belonging to one or more of the following types: Assembly/disassembly; metal deposition; metal shaping; organic deposition; printed wiring board; surface finishing; surface preparation; and dry dock operations. Typical unit operations at MP&M facilities include any one or more of the following: abrasive blasting, abrasive jet machining, acid treatment, adhesive bonding, alkaline cleaning for removal of oil, alkaline treatment, anodizing, aqueous degreasing, assembly, barrel finishing, brazing, burnishing, calibration, chemical conversion

coating, chemical milling, chromate conversion coating, corrosion preventive coating, disassembly, electrical discharge machining, electrochemical machining, electroless plating, electrolytic cleaning, electroplating, electron beam machining, electropolishing, floor cleaning, grinding, heat treating, hot-dip coating, impact deformation, laminating, laser beam machining, machining, metal spraying, painting (spray/brush or immersion), photo resist applications, physical vapor deposition, plating, plasma arc machining, polishing, pressure deformation, rinsing, salt bath descaling, soldering, solvent degreasing, sputtering, stripping (paint or metallic coating), testing, thermal cutting, thermal infusion, ultrasonic machining, vacuum metalizing, washing finished product, welding, wet air pollution control, and numerous sub-operations within those listed above. EPA notes that not all MP&M unit operations generate process wastewater. In addition, many of these operations frequently have associated rinses that remove materials that preceding processes deposit on the surface of the workpiece and water-discharging air pollution control devices which become contaminated with process contaminants removed from the air. EPA is including both of these wastewater flows under the scope of today's proposed regulation. (See § 438.2(e)).

The Agency is also including under today's proposed regulation wastewater discharges from non-contact, nondestructive testing performed at MP&M facilities. (See § 438.2(e)). A common source of "nondestructive testing" wastewater is photographic waste from nondestructive X-ray examination of parts. The Agency is proposing to cover this wastewater because of the potential concentration of silver in the wastewater discharge.

EPA is not covering wastewater generated from electroplating-type operations during semiconductor wafer manufacturing or wafer fabrication processes (*i.e.*, tape automated bonding—"TAB" and controlled collapse chip connection—"C-4") occurring in a "clean room" environment because it believes that these operations are much different than the other electroplating operations that EPA is covering by these guidelines and do not contribute significant amounts of pollutants to the wastewater discharge. (See § 438.1(e)). The new and emerging technologies involved in semiconductor wafer fabrication add microscopic amounts of metal (usually copper) to only selective portions of the wafer to

enhance circuitry and decrease wafer size. Other electroplating operations that EPA is proposing to cover under this guideline generally occur on a larger scale and produce a more concentrated metal-bearing wastewater. Moreover, the wafer fabrication processes occur in a clean room with a highly-controlled atmosphere and using highly-purified materials and specialized tools that are much different from typical metal-finishing equipment. These specialized tools and conditions enable the manufacturer to add microscopic levels (less than one micron) of metal to only one side of the wafer, in contrast to the non-selective, macroscopic (micron to micron-inch) plating used in common metal finishing. Therefore, EPA is proposing not to cover wastewater from wafer fabrication processes under this rule. However, in today's proposal the Agency is covering wastewater generated from electroplating during semiconductor final wafer assembly. (See § 438.1(e)).

EPA is proposing to cover wastewater generated from washing vehicles only when it occurs as a preparatory step prior to performing an MP&M unit operation (e.g., prior to disassembly to perform engine maintenance or rebuilding). (See § 438.1(f)). MP&M facilities may perform these preparatory washes to remove oils, dirt and grit prior to performing the maintenance or repair operations and as a result the combined wastewater contains significant amounts of oil and grease along with total suspended solids. However, this proposed regulation does not cover the washing of cars, aircraft or other vehicles when it is performed only for aesthetic/cosmetic purposes because EPA does not expect these washes to contain significant concentrations of pollutants. (See § 438.1(f)).

EPA is also proposing to cover wastewater generated from unit operations performed by drum reconditioners/refurbishers to prepare drums for reuse. (See § 438.1(a)). These facilities perform operations on metal drums such as chaining, caustic washing, acid cleaning, acid etching, impact deformation, leak testing, corrosion inhibition, shot blasting, and painting. The Agency considers facilities that perform these operations as part of the Stationary Industrial Equipment sector. However, the Agency notes that it is currently considering the development of an effluent guideline for the drum reconditioning industry. If EPA develops regulations for this new industrial category, it is possible that the Agency would cover these facilities under that rule and not under the MP&M regulation. EPA solicits

comment on whether these facilities would be more appropriately covered under the MP&M rule or under a new industrial category for drum reconditioners.

EPA did not collect information with respect to MP&M operations at gasoline service stations (SIC code 5541), passenger car rental facilities (SIC code 7514), or utility trailer and recreational vehicle rental facilities (SIC code 7519); therefore, this proposed regulation does not cover process wastewater generated by maintenance and repair activities when they occur at gasoline stations or car rental facilities. (See § 438.1(g)). As discussed in Sections VI.C and XII of this notice, EPA is proposing to exclude facilities in the General Metals and Oily Waste subcategories that discharge MP&M process wastewater below a specified flow rate (one and two million gallons per year, respectively). EPA expects that many facilities that only perform repair and maintenance activities (e.g., auto repair shops, light aircraft maintenance) will be excluded as most will fit into the applicability of either the General Metals or Oily Waste subcategories and have process wastewater discharges below the subcategory-specific flow cutoffs.

EPA is proposing to cover MP&M process wastewater at mixed-use facilities (i.e., any municipal, private, U.S. military or federal facility which contains both industrial and commercial/administrative buildings at which one or more industrial sites conduct operations within the facility's boundaries). (See § 438.1(h)). However, unlike the typical industrial facility, such as an aircraft or electronic equipment manufacturing plant with one primary manufacturing activity, the majority of military installations are mixed-use facilities and are more like municipalities with several small industries as well as other operations within their boundaries. Many of these installations also include a variety of tenant activities, including contractor and other Department of Defense federal agency activities. At these mixed-use facilities, EPA is proposing to cover wastewater from manufacturing, maintenance and repair activities performed on metal parts, products or machines (e.g. maintenance and repair of vehicles and aircraft). (See § 438.1(h)). EPA concluded that these types of operations will generate wastewater containing either high metals content or high oil and grease, or both. EPA is not proposing to cover wastewater from other non-metal repair, maintenance or manufacturing operations at mixed-use facilities such as wastewater from residential housing,

schools, churches, recreational parks, shopping centers, gas stations, utility plants, and hospitals. The Agency believes that wastewater generated from these activities will not contain the same types and concentrations of pollutants (such as metals and oil and grease) as wastewater from MP&M operations. Finally, the geographic size of many military installations (for example, over 300 square miles at Fort Hood, TX and over 1.1 million acres at the China Lake Naval Air Warfare Center, CA) makes it difficult to treat them as a single facility. Therefore, EPA is proposing to allow wastewater generated at different sites (individual buildings as well as outdoor locations where manufacturing, rebuilding, or maintenance occur on metal parts, products, or machines) within a mixed-use facility to be dealt with as separate discharges for the purpose of applying the appropriate low flow cutoff (when applicable). EPA is proposing to allow the control authority to use its discretion in determining which wastewater discharges can be considered separate discharges for the purposes of applying the appropriate low flow cutoff (when applicable). The determination would likely be based on the degree of proximity between industrial operations and a practical application of the requirements for applicable MP&M subcategories. Control authorities (and permit writers) will have to determine when it is appropriate to apply standards for more than one subcategory to a mixed-use facility and when to use the combined waste stream formula (or building block approach). For example, a military installation that generates wastewater from vehicle maintenance operations that is treated in a separate wastewater system than wastewater generated from its metal finishing operations could be covered by both the Oily Wastes subcategory for its vehicle maintenance operations and by the General Metals subcategory for its surface finishing operations. (See Section VI for a discussion of subcategorization and subcategory-specific applicability).

EPA seeks information from other facilities that believe they would fall within this mixed-use facility category. In addition, EPA seeks comments on the choice to allow control authorities to make a determination concerning applying the low flow cutoffs to separate discharges and the factors for making such a decision as well as alternative ways to divide a mixed-use facility.

See Section II.B for a discussion on the applicability of today's proposed rule with respect to the thirteen existing

metals-related effluent limitations guidelines and standards regulations.

IV. Industry Description

As described in Section III, the MP&M industry is comprised of facilities that manufacture, rebuild, or maintain metal parts, products or machines to be used in one of 18 industrial sectors. Based on results of the MP&M survey database, there are an estimated 89,000 MP&M sites. Based on detailed survey results, an estimated 63,000 MP&M sites discharge process water. Of the facilities discharging process wastewater, EPA estimates that 93 percent are indirect dischargers and 7 percent are direct dischargers. The Agency estimates that there are approximately 26,000 facilities that fall into one of three zero discharge categories: zero discharge, non-water-using, or contract haulers.

MP&M water-discharging sites range in size from less than 10 employees to sites with tens of thousands of employees and from wastewater discharge flow rates of less than 100 gallons per year to wastewater discharge flow rates exceeding 100 million gallons per year. Of water discharging facilities, approximately 98 percent of MP&M sites have 500 or fewer employees and approximately 78 percent of MP&M sites have 100 or fewer employees. EPA estimates that facilities with less than 100 employees discharge approximately 11 percent of the total annual wastewater discharged by the MP&M

industry and that facilities having between 100 and 500 employees discharge approximately 50% of the industry total flow. Facilities with greater than 500 employees discharge 39 percent of the industry total.

MP&M facilities are located throughout the United States. The Agency received survey data from every EPA region and 48 separate states. EPA estimates that the largest concentrations of MP&M facilities are located in EPA Regions III (MD, PA, VA, WV), V (IL, IN, MI, MN, OH, WI), and IX (AZ, CA, HI). In addition EPA estimates the seven states with the largest concentrations of MP&M facilities are: California (25 percent), Pennsylvania (23 percent), Virginia (11 percent), Ohio (5 percent), Colorado (4 percent), Texas (3 percent), and Indiana (2 percent).

EPA estimates that approximately 3 percent of the industry (water dischargers and zero dischargers) generates annual revenues less than \$100,000, approximately 41 percent generate annual revenues between \$100,000 and \$500,000, approximately 5 percent generate annual revenues between \$500,000 and \$1,500,000, and approximately 33 percent generate over \$5,000,000 annual revenues. The Agency notes that facilities with annual revenues greater than \$5,000,000 discharge approximately 73 percent of the total wastewater discharged by the industry.

Although facilities in the MP&M industry produce a wide range of products, the operations performed can be described by two types of activities: manufacturing, and rebuilding/maintenance. Manufacturing is the series of unit operations necessary to produce metal products, and is generally performed in a production environment. Rebuilding/maintenance is the series of unit operations necessary to disassemble used metal products into components, replace the components or subassemblies or restore them to original function, and reassemble the metal product. These operations are intended to keep metal products in operating condition and can be performed in either a production or a non-production environment.

Table IV-1, below, summarizes the estimated number of MP&M sites (water dischargers and zero dischargers) and total discharge flow (prior to implementation of the proposed rule) by activity or activity combination. The largest number of sites, approximately 44,000, perform "rebuilding/maintenance only" and account for approximately 9 percent of the total estimated discharge flow for the industry. "Manufacturing only" represents the next largest number of facilities (27,000) and represents the largest percentage of the total estimated discharge flow for the industry (75.2 percent).

TABLE IV-1.—MP&M SITES * AND TOTAL DISCHARGE FLOW BY ACTIVITY COMBINATION

Activity	Estimated number of water discharging MP&M sites	Total estimated discharge flow (million gal/yr)	Percentage of total water discharging MP&M sites	Percentage of total discharge flow
Manufacturing, Rebuilding/Maintenance	7,400	11,200	8.3	9.1
Manufacturing Only	27,000	91,700	30.4	75.2
Rebuilding/Maintenance Only	44,000	11,100	49.5	9.1
Unknown/others	10,500	8,100	11.8	6.6
Total **	89,000	122,000	100.0	100.0

* This table includes all MP&M sites, for a presentation of this distribution for water discharging sites only, see the Technical Development Document for today's proposal.

** Totals may not add due to rounding.

Of the 26,000 sites that achieve zero discharge of process wastewater, many use but do not discharge process water. Based on information from the MP&M Detailed Surveys, site visits, and technical literature (see Section V for a discussion of the data collection activities), these sites achieve zero discharge of process wastewater in one or more of the following ways:

- Sites contract haul for off-site disposal all process wastewater generated on site;

- Sites discharge process wastewater to either on-site septic systems or deep-well injection systems;

- Sites perform end-of-pipe treatment and reuse all process wastewater generated on site;

- Sites perform either in-process or end-of-pipe evaporation to eliminate wastewater discharges; or

- Sites perform in-process recirculation and recycling to eliminate wastewater discharges.

EPA's Underground Injection Control (UIC) Program, authorized by the Safe Drinking Water Act, regulates shallow on-site systems and deep wells that discharge fluids or wastewater into the subsurface and thus may endanger underground sources of drinking water.

If a facility disposes any wastewater (other than solely sanitary waste) into a shallow disposal system (e.g., septic system or a floor drain connected to a dry well) that well is covered by the UIC program. If you think you have a UIC

disposal well on your facility, you should contact your State UIC Program authority to determine your compliance status.

EPA published the Class V Rule in the **Federal Register** on December 7, 1999 (64 FR 68545), which affected facilities using on site systems to dispose waste associated with motor vehicle service and repair in state-designated groundwater protection areas. The EPA is scheduled to develop additional requirements for other Class V wells that receive endangering waste. Contact your State UIC Program for more information on these developing regulations.

V. Summary of Data Collection Activities

A. Existing Data Sources

While developing today's proposal, EPA reviewed data from other metals industry effluent guidelines, the National Risk Management Research Laboratory (NRMRL) treatability database, the 50 POTW Study, the Domestic Sewage Study, and the Toxics Release Inventory (TRI).

For the MP&M technology effectiveness assessment effort, EPA reviewed sampling data collected to characterize treatment systems for the development of effluent guidelines for other metals industries (see Section II.B for a discussion on other metals industry effluent guidelines). For several previous effluent guidelines, EPA used treatment data from metals industries to develop the Combined Metals Database (CMDB), which served as the basis for developing limits for these industries. EPA also developed a separate database used as the basis for limits for the Metal Finishing category. EPA used the CMDB and Metal Finishing data as a guide in identifying well-designed and well-operated MP&M treatment systems. EPA did not use these data in developing the MP&M technology effectiveness concentrations, since the Agency collected sufficient data from MP&M sites to develop technology effectiveness concentrations.

EPA also reviewed the Technical Development Documents (TDDs), sampling episode reports, and supporting record materials for the other metals industries' rulemakings to identify available data. EPA used these data for the preliminary assessment of the MP&M industry, but did not use these data for estimating MP&M pollutant loadings because EPA obtained sufficient data for the MP&M sampling program to characterize the MP&M unit operations.

EPA's National Risk Management Research Laboratory (NRMRL) developed a treatability database (formerly called the Risk Reduction Engineering Laboratory (RREL) database) to provide data on the removal and destruction of chemicals in various types of media, including water, soil, debris, sludge, and sediment. This database contains treatability data from POTWs and industrial facilities for various pollutants. The database includes physical and chemical data for each pollutant, the types of treatment used to treat the specific pollutants, the types of wastewater treated, the size of the POTW or industrial site, and the treatment concentrations achieved. EPA used this database as one means to assess removal of MP&M pollutants of concern by POTWs.

In September 1982, EPA published the *Fate of Priority Pollutants in Publicly Owned Treatment Works*, referred to as the 50 POTW Study. The purpose of this study was to generate, compile, and report data on the occurrence and fate of the 129 priority pollutants in 50 POTWs. The report presents all of the data collected, the results of preliminary evaluations of these data, and the results of calculations to determine the quantity of priority pollutants in the influent to POTWs; discharged from the POTWs; in the effluent from intermediate process streams; and in the POTW sludge streams. EPA used the data from this study as one means to assess removal by POTWs of MP&M pollutants of concern (see Section XII.A for additional discussion on the use of the 50 POTW Study).

In February 1986, EPA issued the "Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works", referred to as the Domestic Sewage Study (DSS). This report, which was based in part on the 50 POTW Study, revealed a significant number of sites discharging pollutants to POTWs, which are a threat to the treatment capability of the POTW. These pollutants were not regulated by national categorical pretreatment standards at that time. EPA used the information in the DSS in developing the Preliminary Data Summary (PDS) for the MP&M category (October 1989).

The Toxics Release Inventory (TRI) database contains specific toxic chemical release and transfer information from manufacturing facilities throughout the United States. EPA considered using the TRI database in developing the MP&M effluent guidelines. However, EPA did not use TRI data on wastewater discharges from MP&M sites because sufficient data

were not available for effluent guidelines development. For example, in developing the MP&M effluent guidelines, EPA uses wastewater influent concentrations to characterize a facility's wastewater and to calculate treatment efficiency (*i.e.*, percent removal across the treatment system). TRI does not provide concentrations for the influent to a facility's treatment system. EPA also did not use the data on wastewater discharge because many MP&M sites do not meet the reporting thresholds for the TRI database.

B. Survey Questionnaires

As discussed in Section II.C, EPA originally intended to propose the MP&M rulemaking in two phases. Therefore, EPA's data collection efforts, particularly the use of survey questionnaires, was handled in two phases to collect data from the relevant industrial sectors. EPA distributed two screener and six detailed questionnaires (surveys) between 1989 and 1996. For a list of surveys by distribution date, see the Technical Development Document for today's proposed rule.

1. Screener Surveys

EPA developed and distributed two screener surveys. In 1990, EPA distributed 8,342 screener surveys to sites believed to be engaged in the original seven Phase I MP&M sectors. In 1996, EPA distributed 5,325 screener surveys to sites believed to be engaged in the eleven Phase II MP&M sectors. The purpose of the screener surveys was to identify sites to receive the more detailed follow-up surveys and to make a preliminary assessment of the MP&M industry.

In each case, EPA identified the SIC codes applicable to the respective MP&M sectors and then calculated the number of sites to receive the screener within each SIC code by a coefficient of variation (CV) minimization procedure (see the respective Database Summary Reports for the screener surveys in the public record for a detailed discussion of the CV procedure). Based on the number of sites selected within each SIC code, the Agency purchased a list of randomly selected names and addresses from Dun & Bradstreet. This list included twice the number of sites specified by the CV minimization procedure for each SIC code. Dun & Bradstreet randomly selected the requested number of sites from the Dun & Bradstreet database for each SIC code. From this list of potential recipient sites, the Agency randomly selected sites to receive the screener surveys. For a more detailed discussion on the screener surveys, see the Technical

Development Document for today's proposed rule.

EPA also sent the 1996 screener survey to 1,750 randomly selected sites in Ohio for the purpose of collecting information for an environmental benefits study. (See Section XX.F or the Economic, Environmental, and Benefits Analysis for today's proposed rule for a detailed discussion of EPA's Ohio Benefits Case Study).

2. Industrial Detailed Surveys

Based on responses to the 1990 screener, EPA sent a more detailed survey to a select group of water-using MP&M sites. The Agency designed this survey to collect detailed technical and financial information. EPA selected 1,020 detailed survey recipients from the following three groups of sites:

- Water-discharging 1989 screener respondents (860 sites);
- Water-using 1989 screener respondents that did not discharge process water (74 sites); and
- Water-discharging sites from well-known MP&M companies that did not receive the 1989 screener (86 sites).

EPA used information from the first two groups of survey recipients to develop pollutant loadings and reductions and to develop compliance cost estimates. Because EPA did not randomly select the third group of recipients, EPA did not use the data to develop national estimates.

In an effort to reduce burden on survey recipients for the second phase of the data collection effort, EPA developed two similar detailed surveys. Based on the development of the 1995 MP&M proposal, EPA chose to collect more detailed information from sites with annual process wastewater discharges greater than one million gallons per year (1 MGY). EPA sent the "long" detailed survey to all 353 1996 screener respondents who indicated they discharged one million or more gallons of MP&M process wastewater annually and performed MP&M operations. The Agency sent the "short" detailed survey to 101 randomly selected 1996 screener respondents who indicated they discharged less than one million gallons of MP&M process wastewater annually and performed MP&M operations.

The detailed surveys collected information to identify the site location and contact person, number of employees, facility age, process wastewater discharge status and destination, and wastewater discharge permits and permitting authority as well as general information about metal types processed, MP&M products and production levels, water use for unit

operations, and wastewater discharge from unit operations. EPA used the process information to evaluate water use and discharge practices and sources of pollutants for each MP&M unit operation. EPA also requested detailed information on MP&M wet unit operations, pollution prevention practices, wastewater treatment technologies, costs for water use and wastewater treatment systems, and wastewater/sludge disposal costs. EPA also requested each site to provide block diagrams of the production process and the wastewater treatment system. The unit operation information included: metal types processed, production rate, operating schedule, chemical additives, volume and destination of process wastewater and rinse waters, in-process pollution prevention technologies, and in-process flow control technologies. The information EPA requested for each wastewater treatment unit included: operating flow rate, design capacity, operating time, chemical additives, and unit operations discharging to each treatment unit. In addition, EPA asked each site to provide the type of MP&M wastewater sampling data collected. EPA used these data to characterize the industry, to perform subcategorization analyses, to identify best management practices, to evaluate performance of the treatment technology for inclusion in the regulatory options, and to develop regulatory compliance cost estimates.

EPA also collected detailed financial and economic information about the site or the company owning the site. In addition, the 1996 long detailed questionnaire included a section that requested supplemental information on other MP&M facilities owned by the company. EPA included this voluntary section to measure the combined impact of proposed MP&M effluent guidelines on companies with multiple MP&M facilities that discharge process wastewater. This section requested the same information collected in the 1996 MP&M screener survey. Responses to questions in this section provided the size, industrial sector, revenue, unit operations, and water usage of the company's other MP&M facilities.

The 1996 short survey included the identical general site and process information and economic information collected in the long detailed survey. However, to minimize the burden on facilities discharging less than one million gallons of process wastewater, EPA did not require these facilities to provide the detailed information on MP&M unit operations or treatment technologies that the Agency requested in the long survey. For a question-by-question comparison of the short and

long 1996 detailed surveys, see the Technical Development Document for today's proposed rule.

Finally, EPA developed a detailed survey, under a separate rulemaking effort, to collect detailed information from facilities that are currently covered by the Iron and Steel Manufacturing effluent guidelines. Following field sampling of iron and steel sites and review of the completed industry surveys, EPA decided that some iron and steel operations would be more appropriately covered by the MP&M rule because they were more like MP&M operations (see Section VI.C.5 for a discussion on the Steel Forming & Finishing subcategory). Based on EPA's decision regarding these operations, the Agency coded and entered process information from 47 iron and steel surveys into the MP&M costing input database.

3. Municipality Survey

EPA distributed the municipality surveys in 1996 to city and county facilities that might operate MP&M facilities. The Agency designed this survey to measure the impact of this rule on municipalities and other government entities that perform maintenance and rebuilding operations on MP&M products (e.g., bus and truck, automobiles).

The Agency sent the municipality survey to 150 city and county facilities randomly selected from the *Municipality Year Book—1995* based on population and geographic location. EPA allocated sixty percent of the sample to municipalities and 40 percent to counties. The 60/40 distribution was approximately proportional to their aggregate populations in the frame. EPA divided the municipality sample and the county sample into three size groupings as measured by population. For municipalities, the population groupings were: less than 10,000 residents, 10,000–50,000 residents, and 50,000 or more residents. For counties, the population groupings were: less than 50,000 residents, 50,000–150,000 residents, and 150,000 or more residents. The geographic stratification conformed to the Census definitions of Northeast, North Central, South, Pacific, and Mountain states. The technical questions in the Municipality Survey were basically identical to the 1996 short detailed survey; however, EPA adapted the financial and economic questions so that they were appropriate for these facilities.

4. Federal Facilities Survey

In April 1998, EPA distributed the federal facilities detailed survey to the following federal agencies:

- Department of Energy;
- Department of Defense;
- National Aeronautics and Space Administration (NASA);
- Department of Transportation (including the United States Coast Guard);
- Department of the Interior;
- Department of Agriculture; and
- United States Postal Service.

EPA designed this survey to assess the impact of the MP&M effluent limitations guidelines and standards on federal agencies that operate MP&M facilities. EPA distributed the survey to federal agencies likely to perform industrial operations on metal products or machines. The Agency requested that the representatives of the seven listed federal agencies voluntarily distribute copies of the survey to sites they believed performed MP&M operations. The information collected in the 1996 federal survey was identical to the long survey. After engineering review and coding, EPA entered data from 44 federal surveys into the database. Because EPA did not randomly select the survey recipients, data from these questionnaires was not used to develop national estimates.

5. POTW Survey

EPA distributed the Publicly Owned Treatment Works (POTW) survey in November 1997. The Agency designed this survey to estimate benefits associated with implementation of the MP&M regulations and to estimate possible costs and burden that POTWs might incur in writing MP&M permits or other control mechanisms. The Agency sent the POTW survey to 150 POTWs with flow rates greater than 0.50 million gallons per day. EPA randomly selected the recipients from the 1992 Needs Survey Review, Update, and Query System Database (RUQus). The Agency divided the POTW sample into two strata by daily flow rates: 0.50 to 2.50 million gallons, and 2.50 million gallons or more.

In addition to the total volume of wastewater treated at the site, the POTW survey requested the number of industrial permits written, the cost to write the permits, the permitting fee structure, the percentage of industrial dischargers covered by National Categorical Standards (*i.e.*, effluent guidelines), and the percentage of permits requiring expensive administrative activities. EPA used this information to estimate administrative

burden and costs. In addition, EPA requested information on the use or disposal of sewage sludge generated by the POTW. The Agency only required POTWs that received discharges from an MP&M facility to complete those questions. The sewage sludge information requested included the amount generated, use or disposal method, metal levels, use or disposal costs, and the percentage of metal loadings from MP&M facilities. The Agency used this information to assess the potential changes in sludge handling resulting from the MP&M rule and to estimate economic benefits to the POTW (See Section XIX.B.2 for a discussion of the results of the POTW survey.)

C. Wastewater Sampling and Site Visits

The Agency visited 201 MP&M sites to collect information about MP&M unit operations, water use practices, pollution prevention and treatment technologies, and waste disposal methods, and to evaluate sites for potential inclusion in the MP&M sampling program (described below). In general, the Agency visited sites to encompass the range of sectors, unit operations, and wastewater treatment technologies within the MP&M industry.

The Agency based site selection on information contained in the MP&M screener and detailed surveys. The Agency also contacted regional EPA personnel, state environmental agency personnel, and local pretreatment coordinators to identify MP&M sites believed to be operating in-process source reduction and recycling technologies or end-of-pipe wastewater treatment technologies. The Agency also attempted to visit sites of various sizes. EPA visited sites with wastewater flows ranging from less than 200 gallons per day to more than 1,000,000 gallons per day. Site-specific selection criteria are discussed in site visit reports (SVRs) prepared for each site visited by EPA.

In addition to performing site visits, EPA conducted wastewater sampling episodes at 72 sites to obtain data on the characteristics of MP&M wastewater and solid wastes, and to assess the following: The loading of pollutants to surface waters and POTWs from MP&M sites; the effectiveness of technologies designed to reduce and remove pollutants from MP&M wastewater; design and operational parameters; and the variation of MP&M wastewater characteristics across unit operations, metal types processed in each unit operation, and sectors.

The Agency used information collected during MP&M site visits to identify candidate sites for sampling.

The Agency used the following general criteria to select sites for sampling:

- The site performed MP&M unit operations EPA was evaluating for development of the MP&M regulation;
- The site processed metals through MP&M unit operations for which the metal type/unit operation combination needed to be characterized for the sampling database;
- The site performed in-process source reduction, recycling, or end-of-pipe treatment technologies that EPA was evaluating for technology option development; and
- The site performed unit operations in a sector that EPA was evaluating for development of the MP&M regulation.

The Agency also attempted to sample at sites of various sizes. EPA sampled at sites with wastewater flows ranging from less than 200 gallons per day to more than 1,000,000 gallons per day.

In addition, EPA worked with several stakeholders to collect site visit and sampling data from MP&M facilities. Following the 1995 proposal of the Phase I MP&M rule, the Association of American Railroads (AAR), the Hampton Roads Sanitation District (HRSD), and the Los Angeles County Sanitation Districts (LACSD) proposed potential sampling sites to the Agency, and EPA visited these sites to identify candidates for sampling. After conducting site visits, EPA selected five sites for sampling episodes to characterize end-of-pipe treatment technologies in metal finishing and aircraft parts job shops and the railroad and shipbuilding industrial sectors. EPA prepared detailed sampling plans based on the information collected during the five site visits, and supported AAR, HRSD and LACSD sampling episodes for the collection of wastewater samples, and EPA prepared the sampling episode reports.

The Agency collected the following types of information during each sampling episode:

- Dates and times of sample collection;
- Flow data corresponding to each sample;
- Production data corresponding to each sample of wastewater from MP&M unit operations;
- Design and operating parameters for source reduction, recycling, and treatment technologies characterized during sampling;
- Information about site operations that had changed since the site visit or that were not included in the SVR; and
- Temperature and pH of the sampled wastestreams.

EPA documented all data collected during sampling episodes in the

sampling episode report (SER) for each sampled site which are located in the MP&M Administrative Record. Non-confidential information from these reports is available in the public record for this proposal. For detailed information on sampling and preservation procedures, analytical methods, and quality assurance/quality control procedures see the Technical Development Document for today's proposed rule.

D. Industry Submitted Data

EPA evaluated other industry data in developing the MP&M effluent guidelines. The data sources reviewed include: public comments to the 1995 MP&M Phase I proposed rule; the Metal Finishing F006 Benchmark Study (September 1998); data supporting the 180-Day Accumulation Time Under RCRA for Waste Water Treatment Sludges From the Metal Finishing Industry Final Rule (65 FR 12377, March 8, 2000); data provided by the Aluminum Anodizing Council (AAC), the American Wire Producers Association (AWPA), and the Aerospace Association; data and storm water pollution prevention plans provided by several shipbuilding sites, and data from periodic compliance monitoring reports/discharge monitoring reports for several sites that were part of EPA's wastewater sampling program. Data submitted with the MP&M Phase I comments did not include the quality control data required to verify the accuracy of sample analyses and, therefore, EPA did not use the data. These data sources are located in the MP&M Administrative Record. Non-confidential information is available in the public record for this proposal.

E. Summary of Public Participation

EPA has met regularly with industry trade associations and their members at various association annual meetings and conferences. There are over 20 trade associations that represent facilities that were part of the initial scope of the MP&M proposed rule. These trade associations have formed an informal coalition (referred to as the "MP&M" coalition) that coordinates regular meetings with representatives from the various affected industries. In the past year, EPA has also participated in several of the Small Business Administration's "Small Business Roundtable" meetings.

As discussed in detail in Section XXII.C, EPA conducted outreach and convened a Small Business Advocacy Review Panel. For this proposed rule, the small entity representatives included nine small MP&M facility

owner/operators, one small municipality, and the following six trade associations representing different sectors of the industry: National Association of Metal Finishers (NAMF)/ Association of Electroplaters and Surface Finishers (AESF)/MP&M Coalition; the Association Connecting Electronics Industries (also known as IPC); Porcelain Enamel Institute; American Association of Shortline Railroads (ASLRA); Electronics Industry Association (EIA); and the American Wire Producers Association (AWPA).

Because many facilities affected by this proposal are indirect dischargers, the Agency also conducted outreach to publicly owned treatment works (POTWs) individually and through the Association of Municipal Sewerage Agencies (AMSA). EPA also conducted a survey of 150 POTWs to assess the burden associated with implementing the proposed MP&M rule (see Section V.B.5 above for discussion of the POTW survey). In addition, EPA made a concerted effort to consult with pretreatment coordinators and state and local entities that will be responsible for implementing this regulation.

EPA sponsored three stakeholders' meetings between November 1997 and May 2000. Two meetings were held in Washington, DC, and the third was held in Chicago, IL. The primary objectives of the meetings were to present the Agency's current thinking regarding the technology bases for the MP&M proposed rule and to solicit comments, issues, and new ideas from interested stakeholders, including members of environmental groups.

EPA provided information on the potential technology options and in-process pollution prevention practices as well as the potential subcategories. EPA also provided preliminary information on pollutant reductions, compliance costs, and potential monitoring flexibility.

Most recently, EPA has put up a website (<http://www.epa.gov/ost/guide/mpm>) to provide ongoing information on the MP&M project. The site includes background information, links to related documents, and information presented at MP&M stakeholders meetings.

VI. Industry Subcategorization

A. Methodology and Factors Considered for Basis of Subcategorization

EPA may divide a point source category (e.g., MP&M) into groupings called "subcategories" to provide a method for addressing variations between products, raw materials, processes, and other factors which result in distinctly different effluent

characteristics. Regulation of a category by using formal subcategories provides that each subcategory has a uniform set of effluent limitations which take into account technological achievability and economic impacts unique to that subcategory. In some cases, effluent limitations within a subcategory may be different based on consideration of the factors described in section 304(b)(2)(b) of the CWA, 33 U.S.C. 1314(b)(2)(B). The CWA requires EPA, in developing effluent limitations guidelines and pretreatment standards, to consider a number of different subcategorization factors. The statute also authorizes EPA to take into account other factors that the Agency deems appropriate. Stakeholders specifically suggested that EPA consider subcategories based on industry sector or type of activity within an industry sector (e.g., repair and maintenance versus manufacturing), some of which appear to have very low baseline pollutant loadings.

EPA considered the following factors in its evaluation of potential MP&M subcategories:

- Unit operation;
- Activity;
- Raw materials;
- Products;
- Size of site;
- Location;
- Age;
- Nature of the waste generated;
- Economic impacts;
- Treatment costs;
- Total energy requirements;
- Air pollution control methods;
- Solid waste generation and disposal; and
- POTW burden.

One result of grouping similar facilities into subcategories is the increased likelihood that the regulations are practicable, and it diminishes the need to address variations between facilities through a variance process (Weyerhaeuser Co. V. Costle, 590 F.2d 1011, 1053 (D.C. Cir. 1978)).

EPA considered subcategorizing the MP&M category by industrial sector (e.g., aerospace, aircraft, bus and truck, electronic equipment, hardware, household equipment, instruments, job shops, mobile industrial equipment, motor vehicles, office machines, ordnance, precious metals and jewelry, printed wiring boards, railroad, ships and boats, stationary industrial equipment, and miscellaneous metal products). Sectors are broadly defined and not only include manufacturing and repair facilities within the sector (e.g., shipbuilding facilities in the ship and boat sector), but also include facilities that produce products that are used within the sector (e.g., a facility that

manufactures hydraulic pumps used on ships is also in the ship and boat sector). The Agency determined that subcategorization based solely on industrial sector would require much more detailed subcategorization scheme than the approach proposed (see below). Adopting a subcategorization scheme based on industrial sector would complicate the implementation of the limitations and standards because permit writers might be required to develop facility-specific limitations across multiple subcategories.

The Agency determined that wastewater characteristics, unit operations, and raw materials used to produce products within a given sector are not always the same from site to site, and they are not always different from sector to sector. Within each sector, sites can perform a variety of unit operations on a variety of raw materials. For example, a site in the aerospace sector may primarily machine aluminum missile components and not perform any surface treatment other than alkaline cleaning. Another site in that sector may electroplate iron parts for missiles and perform little or no machining. Wastewater characteristics from these sites may differ because of the different unit operations performed and different raw materials used.

Based on the analytical data collected for this rule, EPA has not found a statistically significant difference in industrial wastewater discharge among industrial sectors when performing similar unit operations for cadmium, chromium, copper, cyanide, lead, manganese, molybdenum, nickel, oil & grease, silver, tin, TSS, and zinc. (The analytical data are available in the public record for this rulemaking.) For example, a facility that performs electroplating in the process of manufacturing office machines produces metal-bearing wastewater with similar chemical characteristics as a facility that performs electroplating in the process of manufacturing a part for a bus. Similarly, a facility that performs repair and maintenance on an airplane engine produces oil-bearing wastewater that has similar chemical characteristics to a facility that performs repair and maintenance on construction machinery.

Most MP&M unit operations are not unique to a particular sector and are performed across all sectors. For example, all sectors may perform several of the major wastewater-generating unit operations (e.g., alkaline treatment, acid treatment, machining, electroplating). And, for the most part, the unit operations that are rarely performed (e.g., abrasive jet machining)

are not performed in all sectors, but are also not limited to a single sector. Therefore, a facility in any one of the 18 industrial sectors can generate metal-bearing or oil-bearing wastewater (or a combination of both) depending on what unit operations the facility performs.

In addition, two facilities that may be part of the same sector may generate wastewater with vastly different chemical characteristics and thus require different types of treatment. For example, an automobile manufacturer and an automobile repair facility are both part of the motor vehicle sector. However, the automobile manufacturer may perform unit operations that generate metal-bearing and oil-bearing wastewater (aqueous degreasing, electroplating, chemical conversion coating, etc.) while the automobile repair facility may perform unit operations that only generate oil-bearing wastewater (machining, aqueous degreasing, impact deformation, painting, etc.).

Due to the numerous MP&M facilities that could fall under the scope of multiple sectors, EPA determined that a regulation based on MP&M industrial sector would create a variety of implementation issues for State and local regulators as well as for those multiple-sector facilities. Therefore, as mentioned above, EPA is not proposing to use industrial sector to subcategorize the industry.

In the Phase I proposal, EPA did not subcategorize the Phase I segment of MP&M sectors (see 60 FR 28221; May 30, 1995). As discussed in Section II.C, the scope of the 1995 proposal differed from today's proposal in that it only covered seven of the 18 MP&M industrial sectors. For today's proposal, EPA performed the analysis for determining whether or not to subcategorize considering all facilities under the scope of today's rule (i.e., both Phase I and II industrial sectors). See Section III for a discussion on the scope of today's proposal. Based on this analysis, EPA determined that it is necessary to subcategorize the MP&M industry.

A variety of factors influenced EPA's decision to subcategorize the MP&M industry. First, EPA found two basic types of wastestreams in the industry: (1) wastewater with high metals content (metal-bearing), and (2) wastewater with low concentration of metals, and high oil and grease content (oil-bearing). The type of wastewater a facility generates is directly related to the unit operations it performs. For example, unit operations such as machining, grinding, aqueous degreasing, and impact or pressure

deformation tend to generate a wastewater with high oil and grease (and associated organic pollutants) loadings without significant concentrations of metal pollutants. While other unit operations such as electroplating, conversion coating, chemical etching and milling, and anodizing generate higher metals loadings with moderate/low oil and grease concentrations.

Although many facilities generate both metal- and oil-bearing wastewater, there are a large number of facilities that only generate oil-bearing wastewater. Such facilities are typically machine shops and maintenance and repair facilities. Since the wastewater at these facilities primarily contains oil and grease and other organic constituents, treatment technologies at these facilities focus on oil removal only and do not require the chemical precipitation step needed for treating metal-bearing wastewater. Treatment technologies in place at these facilities generally include ultrafiltration, or chemical emulsion breaking followed by either gravity floatation, coalescing plate oil/water separators, or dissolved air flotation (DAF). Therefore, EPA first divided the industry on the basis of unit operations performed and the nature of the wastewater generated, resulting in the following two groups: (1) metal-bearing with or without oily and organic constituents group; and (2) oil-bearing only group. As a second step, EPA performed an analysis to see if there were any significant differences in the subcategorization factors within the two basic groups.

When looking at facilities with metal-bearing wastewater (with or without oil-bearing wastewater), EPA identified several groups of facilities which could potentially be subcategorized by dominant product, raw materials used, and/or nature of the waste generated. In two subcategories, EPA also considered economic impacts as a factor in subcategorization because of the reduced ability of these facilities to afford treatment costs. There were also two subcategories where the number of facilities that were not currently covered by an existing effluent guidelines regulation was large enough to present an unacceptable burden to POTWs.

Based on the currently available data, EPA is proposing to subcategorize the metal-bearing (with or without oil-bearing wastewater) MP&M facilities into the following subcategories: non-chromium anodizing; metal finishing job shops; printed wiring board facilities; steel forming and finishing facilities; and general metals facilities. EPA describes its rationale for

subcategorization below (see Section VI.C for additional detailed discussion and applicability of each of these subcategories).

The non-chromium anodizers are different from other MP&M facilities in that all of their products are primarily of one metal type—anodized aluminum—and most importantly, they do not use chromic acid or dichromate sealants in their anodizing process. Based on EPA's limited data for these facilities, EPA expects that these facilities have very low levels of metals (with the exception of aluminum) or toxic organic pollutants in their wastewater discharges. EPA determined that other MP&M facilities had much greater concentrations of a wider variety of metals. In addition, due to the presence of large quantities of aluminum, these facilities require much larger wastewater treatment systems to remove the large amounts of aluminum and low levels of alloy metals. The need for larger treatment systems results in higher costs and large economic impacts for this potential subcategory. EPA found that as many as 60 percent of the non-chromium anodizers could experience closures as a result of complying with the proposed regulation (see Section XVI for a discussion of economic impacts). Therefore, based on the difference in raw materials used, product produced, nature of the waste generated (*i.e.*, low levels of pollutants discharged), treatment costs, and projected economic impacts, EPA concluded that a basis exists for subcategorizing the non-chromium anodizing facilities in the MP&M industry.

EPA investigated whether or not to subcategorize the metal finishing and electroplating job shops covered by the Metal Finishing (40 CFR part 433) and Electroplating (40 CFR part 413) effluent guidelines. Although the facilities have metal types that require the same treatment technologies as many other metals-bearing facilities, EPA determined these facilities to be different due to the variability of their raw materials and products as well as the slightly higher level of economic impacts incurred as compared to other costed facilities. As discussed in Section VI.C.2 below, this subcategory includes only those facilities who perform the six operations defining the applicability of the Metal Finishing and Electroplating effluent guidelines and who are "job shops" by the definition provided in the Metal Finishing effluent guidelines (*i.e.*, they own less than 50 percent of the products processed on site on an annual area basis). (See 40 CFR 433.11). Because these facilities are job shops

and perform work on a contract basis, they cannot always predict the type of plating or other finishing operations required. In addition, because these facilities perform work on a large variety of metal types from various customers, the wastewater generated at these facilities can vary from week to week (or even day to day). EPA performed wastewater sampling to specifically identify the variability in the wastewater generated at metal finishing job shops and found that the variability factors calculated solely on the analytical wastewater sampling data of metal finishing and electroplating job shops is higher for most pollutant parameters than those calculated for similar metal-bearing subcategories (*e.g.*, General Metals) (see Section II.D for a discussion of EPA's job shop variability wastewater sampling and Section VIII.B for a discussion on determining limits and variability factors). In addition, EPA found that up to 10 percent of the indirect discharging metal finishing job shops subcategory could experience facility closures as a result of compliance with the proposed regulatory technology option (see Section VIII for a discussion of technology options). Therefore, EPA concluded that it has an appropriate basis for subcategorizing metal finishing and electroplating job shops.

EPA determined that there is a basis for establishing a different subcategory for the printed wiring board facilities from the other facilities in the group of metal-bearing (with or without oil-bearing wastewater) facilities based on raw materials, unit operations performed, dominant product, and nature of the waste generated. First, these facilities process a more consistent mix of metal types (primarily copper, tin, and lead) than other MP&M facilities to produce a specific product. EPA has concluded that this more consistent mix of metal types enables the printed wiring board facilities to tailor their treatment technology and incorporate more of the advanced pollution prevention and recovery technologies (*e.g.*, ion exchange). Printed wiring board facilities generally work with copper-clad laminate material, allowing them to target copper for removal in their wastewater treatment systems or recover the copper using in-process ion exchange. Second, these facilities apply, develop, and strip photoresist—a set of unit operations which is largely unique to this proposed subcategory. This process results in a higher concentration of a more consistent group of organic constituents than other facilities in the metal-bearing

group. Finally, the nature of the wastewater generated at these facilities may also be different due to the fact that these facilities perform more lead-bearing operations (*e.g.*, lead/tin electroplating, wave soldering) than other MP&M facilities.

Steel forming and finishing is another proposed subcategory under the metal bearing (with or without oil-bearing wastewater) group of MP&M facilities. These facilities perform both cold forming and finishing operations on steel at stand-alone facilities as well as at steel manufacturing facilities. EPA formerly covered these facilities under the 1982 Iron and Steel Manufacturing effluent guidelines (40 CFR part 420). Typical operations include: acid pickling, annealing, conversion coating (*e.g.*, zinc phosphate, copper sulfate), hot dip coating and/or electroplating of steel wire or rod, heat treatment, welding, drawing, patenting, and oil tempering. EPA concluded that the basis for subcategorization is the difference in the raw material and dominant product at these facilities. Facilities in this subcategory only process steel and for the most part produce uniformly-shaped products such as wire, rod, bar, pipe and tube. In addition, this is the only subcategory where EPA is proposing to cover forming operations under the MP&M regulations. Effluent guidelines specific to forming operations exist for all other common metal types (*e.g.*, Aluminum Forming (40 CFR part 467); Copper Forming (40 CFR part 468); and Nonferrous Metals Forming & Metal Powders (40 CFR part 471)).

Finally, after subcategorization of the non-chromium anodizing, metal finishing job shops, printed wiring board facilities, steel forming and finishing facilities, EPA is proposing to group the remaining metal-bearing (with or without oil-bearing wastewater) group of MP&M facilities into a subcategory entitled "General Metals." This subcategory would be a "catch-all" for facilities that did not fall into any of the previous subcategories but whose wastewater, at a minimum, requires metals removal and may also require the preliminary treatment steps of oil/water separation, chromium reduction, and cyanide destruction. For example, wastewater generated from most manufacturing operations and heavy rebuilding operations (*e.g.*, aircraft/aerospace, automobile, bus/truck, railroad) would be regulated under the proposed General Metals subcategory.

When looking at facilities with only oil-bearing wastewater for potential further subcategorization, EPA found that there were two types of facilities that were different from the other

facilities in that group based on size, location, and dominant product/activity. The first type of facility includes MP&M operations that occur in shipbuilding dry docks or similar structures, and the second includes railroad line maintenance facilities (see VI.C.8 and VI.C.9, respectively, for a detailed description of these proposed subcategories). Dry docks (and similar structures such as graving docks, building ways, lift barges, and marine railways) are large, outdoor areas exposed to precipitation that shipyards use to perform final assembly, maintenance, rebuilding and repair work on large ships and boats. Due to their size, outdoor location, low level of pollutant loadings discharged to the environment, and the fact this wastewater is unique to the shipbuilding industry, EPA believes that a basis exists to subcategorize shipbuilding dry docks and similar structures. This proposed subcategory does not include other MP&M operations that occur at shipyards (e.g., shore-side operations).

Similarly, railroad line maintenance facilities are outdoor facilities where light maintenance and cleaning of railroad cars, engines and car-wheel trucks occur. Due to their outdoor location, unit operations performed, and low level of pollutant loadings discharged to the environment, EPA concluded that there is a basis to subcategorize railroad line maintenance facilities. EPA notes that this proposed subcategory does not include railroad manufacturing operations or railroad overhaul/rebuilding facilities.

Finally, after subcategorization of the shipbuilding dry dock and railroad line maintenance facilities, EPA is proposing to group the remaining oily-bearing wastewater group of MP&M facilities into a subcategory entitled "Oily Wastes." This subcategory would be a "catch-all" for facilities that did not fall into the two above "oily" subcategories but whose wastewater does not have metals loadings at levels where they can be effectively treated. Following further analysis, EPA has decided not to propose pretreatment standards for indirect discharging facilities in the shipbuilding dry dock and railroad line maintenance subcategories (see Section XII for a discussion pertaining to pretreatment standards).

B. Proposed Subcategories

As discussed above in Section VI.A, EPA has determined that a basis exists for dividing the MP&M category into the following subcategories for the proposed rule: General Metals, Non-Chromium Anodizing, Metal Finishing Job Shops,

Printed Wiring Boards, Steel Forming and Finishing, Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Dock. In Section VI.C below, EPA describes each subcategory and defines the applicability of the rule for facilities in each subcategory. EPA notes that with the exception of the two general subcategories (General Metals and Oily Wastes), the remaining proposed subcategories would not have been relevant to the subcategorization of the Phase I MP&M proposal. The facilities that have been further subcategorized in today's proposal were all part of the Phase II MP&M sectors (see Section II.C for a discussion on the 1995 Phase I proposal).

EPA believes its proposed subcategories make sense, for the reasons discussed above, but requests comment on other possible subcategories. In particular, it has been suggested that the large General Metals subcategory be further subdivided into industrial sectors based on preliminary analyses which suggest that discharges from some sectors may be low enough to warrant exclusion from this regulation. Some of the wastewaters in these sectors may be covered by other effluent guidelines. EPA requests comment on further subdivision of the General Metals subcategory. Commenters should include data to support their suggestions where possible.

C. General Description of Facilities in Each Subcategory

1. General Metals

As discussed above in Section VI.A, EPA has created the General Metals subcategory as a "catch-all" for MP&M facilities that discharge metal-bearing wastewater (with or without oil-bearing wastewater) that do not fit the applicability of the Printed Wiring Board, Non-Chromium Anodizing, Metal Finishing Job Shops, or Steel Forming and Finishing subcategories. Therefore, the General Metals subcategory may include facilities from 17 of the 18 MP&M industrial sectors (i.e., all except the printed wiring board sector). This subcategory also includes General Metals facilities that are owned and operated by states and municipalities. (See Section III for a discussion on the general scope of today's proposal). General Metals facilities likely perform manufacturing or heavy rebuilding of metal products, parts, or machines. Facilities that perform metal finishing or electroplating operations on-site, but do not meet the definition of a job shop (i.e., captive shops), would fit in the

applicability of the General Metals subcategory.

EPA estimates that there are approximately 26,000 indirect dischargers and 3,800 direct dischargers that could be covered by this proposed subcategory. EPA currently regulates 26 percent of the facilities in this subcategory by existing effluent guidelines. Based on responses to its questionnaires, the Agency estimates that the Metal Finishing (40 CFR part 433) and Electroplating (40 CFR part 413) effluent guidelines cover approximately 16 percent of these facilities and other metals related effluent guidelines (such as those discussed in Section II.B.) cover a portion of the wastewater discharges at an additional 10 percent of these facilities.

EPA is proposing to exclude, from the MP&M regulations, indirect discharging facilities that would fall into the General Metals subcategory when they discharge less than or equal to 1 million gallons per year (MGY) of MP&M process wastewater to the POTW. (See Sections II.D, III, and XII for discussions on the proposed low flow cutoff and its impact on POTW burden reduction). In cases where these General Metals facilities discharge less than or equal to 1 MGY to a POTW, these pretreatment standards proposed today do not apply; however, facilities are still subject to other applicable pretreatment standards, including those established under parts 413 and 433. See Sections IX, XI, and XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts associated with the MP&M rule for the General Metals subcategory.

2. Metal Finishing Job Shops

Facilities in the Metal Finishing Job Shops subcategory must meet the following criteria: (1) Discharge wastewater from one or more of the six operations identified in the applicability of the Metal Finishing (40 CFR part 433) and Electroplating (40 CFR part 413) effluent limitations guidelines regulations; and (2) must meet the definition of a job shop. The six identifying operations are: Electroplating, Electroless Plating, Anodizing, Coating (chromating, phosphating, passivation, and coloring), Chemical Etching and Milling, and Printed Circuit Board Manufacture (i.e., Printed Wiring Boards). As in the Metal Finishing effluent guidelines (40 CFR part 433), EPA defines a "job shop" as "a facility which owns not more than 50 percent (on an annual area basis) of the materials undergoing metal finishing." EPA is proposing to include printed

wiring board job shops in this subcategory based on the unique economics of job shop operation. However, EPA solicits comment on the variability of the raw materials, products, and wastewater at printed wiring board job shops. EPA also solicits comment on including printed wiring board job shops under this subcategory or whether EPA should include them in the Printed Wiring Board Subcategory (see Section VI.C.4 for a discussion on the Printed Wiring Board Subcategory).

The Agency estimates that there are approximately 1,500 indirect dischargers and 15 direct dischargers in the proposed Metal Finishing Job Shops subcategory. EPA currently regulates all facilities in this subcategory by the existing Metal Finishing or Electroplating effluent guidelines and standards. EPA is proposing to cover all of these facilities under this proposed rule. Therefore, under today's proposal, facilities subject to the Metal Finishing Job Shops subcategory would no longer be covered by the effluent limitations guidelines and standards in 40 CFR part 413 or 40 CFR part 433. (See § 438.20(a)). EPA estimates that today's proposal could reduce pollutant loadings from this subcategory by an additional 1.75 million toxic pound equivalents² annually over the reductions currently achieved.

EPA has identified approximately 30,000 facilities that meet the definition of job shop but do not discharge wastewater from one or more of the six identifying metal finishing operations as defined in 40 CFR part 433. EPA does not consider such job shops to be part of the Metal Finishing Job Shops subcategory. For example, these other job shops perform assembly, painting, and machining on a contract basis and are likely to fall in the General Metals or Oily Waste subcategories.

EPA is considering an alternative compliance option for this subcategory which includes the demonstration of specified pollution prevention practices for all facilities in the subcategory (or possibly only those facilities below a specified flow cutoff). See Section XXI.D for a discussion on the pollution prevention alternative for Metal

Finishing Job Shops. Also see Sections IX, XI, and XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Metal Finishing Job Shops subcategory.

3. Non-Chromium Anodizing

Facilities covered under the proposed Non-Chromium Anodizing subcategory must perform aluminum anodizing without the use of chromic acid or dichromate sealants in their MP&M operations. Anodizing is a surface conversion operation used to alter the properties of aluminum for better corrosion resistance and heat transfer. Generally, non-chromium anodizing facilities perform sulfuric acid anodizing; however, facilities can use other acids, such as oxalic acid, for aluminum anodizing. EPA is not including anodizers that use chromic acid or dichromate sealants under this subcategory. EPA is proposing to cover those facilities in the General Metals subcategory or the Metal Finishing Job Shops subcategory (if they operate as a job shop). EPA solicits comment on the chromium content of sulfuric acid anodizing baths, anodizing dyes/sealants, and other wastewater from sulfuric acid anodizing.

EPA estimates that there are approximately 190 indirect dischargers and, to date, has not identified any direct dischargers in the Non-Chromium Anodizing subcategory. The wastewater generated at non-chromium anodizing facilities contains very low levels of metals (with the exception of aluminum) and toxic organic pollutants. In addition, as discussed in Section VI.A, above, EPA determined that compliance with the proposed regulation would cause 60 percent of the indirect discharging facilities in this subcategory to close. Therefore, for the reasons discussed in Section XII.F below, EPA is proposing to exclude wastewater from indirect discharging non-chromium anodizing facilities (that also do not use dichromate sealants) from the MP&M categorical pretreatment standards. Such facilities would still need to comply with the pretreatment standards of the Metal Finishing (40 CFR part 433) or Electroplating (40 CFR part 413) effluent guidelines for their non-chromium anodizing wastewater and the general pretreatment standards at 40 CFR part 403. EPA is proposing limits for direct dischargers in this subcategory. EPA solicits comment on whether the applicable standards for indirect discharging non-chromium anodizers should be transferred from 40 CFR part 433 to the MP&M regulation in order to

include all non-chromium anodizers under one regulation. Because today's proposal includes a monitoring waiver for pollutants that are not present (see Section XXI.C.1 for a discussion on the monitoring waiver), the Agency believes that transferring the pretreatment standards for these facilities to the MP&M regulation would allow non-chromium anodizing indirect dischargers to reduce the number of parameters for which they have to monitor. See Section IX, XI, and XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Non-Chromium Anodizing subcategory.

Some facilities that could potentially fall into the Non-Chromium Anodizing subcategory may also perform other metal surface finishing operations at their facilities. If these facilities commingle their wastewater from their non-chromium anodizing operations with wastewater from other surface finishing operations (e.g., chromic acid anodizing, electroplating, chemical conversion coating, etc.) for treatment, they would not be covered by the Non-Chromium Anodizing subcategory. Instead, the General Metals or Metal Finishing Job Shop subcategories would apply. However, for facilities that discharge their non-chromium anodizing wastewater separate from their other surface finishing wastewater, control authorities and permit writers would apply the appropriate limits to each discharge.

4. Printed Wiring Board

EPA is proposing the Printed Wiring Board subcategory to cover wastewater discharges from the manufacture, maintenance, and repair of printed wiring boards (*i.e.*, circuit boards). This subcategory does not include job shops that manufacture, maintain or repair printed wiring boards—EPA is covering these facilities under the Metal Finishing Job Shops subcategory, see Section VI.C.2 above for a discussion. EPA currently regulates all facilities in this subcategory by the existing Metal Finishing or Electroplating effluent guidelines and standards. EPA is proposing to cover all of these facilities under this proposed rule. Therefore, under today's proposal, facilities subject to the Printed Wiring Board subcategory would no longer be covered by the effluent limitations guidelines and standards in 40 CFR part 413 or 40 CFR part 433. Printed wiring board facilities perform unique operations including applying, developing and stripping of photoresist, lead/tin soldering, and wave soldering. EPA estimates that there are approximately 620 indirect

² EPA uses toxic pound-equivalents to indicate the amount of toxicity that a pollutant may exert on human health and aquatic life. The Agency calculates toxic pound-equivalents by multiplying the mass of pollutants discharged (or removed) by that pollutant's toxic weighting factor (TWF). EPA develops TWFs using a combination of toxicity data on human health and aquatic life and are relative to the toxicity of copper. (See Section XVII of today's notice or the Cost-Effectiveness Analysis Document for this proposed rule for a more detailed discussion of toxic weighting factors).

dischargers and 11 direct dischargers in the proposed Printed Wiring Board subcategory. See Sections IX, XI, XII, and XVI of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Printed Wiring Board subcategory.

5. Steel Forming & Finishing

Although many facilities may perform MP&M operations with steel, EPA is proposing to establish the Steel Forming & Finishing subcategory for process wastewater discharges from facilities that perform MP&M operations (listed in Section III) or cold forming operations on steel wire, rod, bar, pipe, or tube. This subcategory does not include facilities that perform those operations on base materials other than steel. In a separate notice, EPA is proposing to revise the Iron and Steel Manufacturing effluent guidelines. The proposed revisions to the Iron and Steel regulations include revising the applicability to exclude those facilities that EPA has determined to be appropriately regulated by the MP&M proposed rule. EPA based this decision on the information gathered during the data collection effort for the proposed revision to the Iron & Steel Manufacturing regulations.

The MP&M Steel Forming & Finishing proposed subcategory does not cover wastewater generated from performing any hot steel forming operations; or wastewater from cold forming, electroplating or continuous hot dip coating of steel sheet, strip, or plates. As mentioned above, the new proposed Iron & Steel Manufacturing effluent guidelines cover wastewater from such operations.

EPA estimates that there are approximately 110 indirect dischargers and 43 direct dischargers in the Steel Forming & Finishing subcategory of the proposed MP&M regulation. All facilities in this subcategory have permits or other control mechanisms under the existing Iron and Steel Manufacturing regulation (40 CFR part 420).

EPA is proposing to cover wastewater from these steel forming and finishing operations, regardless of whether they occur at a stand-alone facility or at a steel manufacturing facility. When a steel manufacturing facility performs these MP&M steel forming and finishing operations and commingles the wastewater for treatment with wastewater from other non-MP&M unit operations, control authorities (e.g., POTWs) and permit writers will need to set limits which account for both the MP&M and the Iron & Steel regulations.

As mentioned previously, EPA refers to this approach as the combined waste stream formula or the building block approach. For facilities that choose to discharge their MP&M Steel Forming & Finishing wastewater separate from their Iron & Steel wastewater, control authorities and permit writers will apply the appropriate limits to each discharge. See Sections IX, XI, and XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Steel Forming & Finishing subcategory.

6. Oily Wastes

EPA has created the Oily Wastes subcategory as a "catch-all" for MP&M facilities that discharge only oil-bearing wastewater and that do not fit the applicability of the other MP&M subcategories. EPA is defining the applicability of this subcategory by the presence of specific unit operations. Facilities in the Oily Wastes subcategory must not fit the applicability of the Railroad Line Maintenance or Shipbuilding Dry Dock subcategories and must only discharge wastewater from one or more of the following MP&M unit operations: alkaline cleaning for oil removal, aqueous degreasing, corrosion preventive coating, floor cleaning, grinding, heat treating, impact deformation, machining, pressure deformation, solvent degreasing, testing (e.g., hydrostatic, dye penetrant, ultrasonic, magnetic flux), painting, steam cleaning, and laundering. EPA is defining "corrosion preventive coating" to mean the application of removable oily or organic solutions to protect metal surfaces against corrosive environments. Corrosion preventive coatings include, but are not limited to: petrolatum compounds, oils, hard dry-film compounds, solvent-cutback petroleum-based compounds, emulsions, water-displacing polar compounds, and fingerprint removers and neutralizers. Corrosion preventive coating does not include electroplating, painting, chemical conversion coating (including phosphate conversion coating) operations. EPA is soliciting comment on the differences in metals content of wastewater generated from "light" phosphoric acid operations (such as some phosphoric acid etching operations and cleaning operations using phosphoric acid solutions) and from phosphate conversion coating. EPA is considering including phosphoric acid etching and cleaning using phosphoric acid solutions in the definition of "oily operations" discussed above. However, the Agency is not considering the inclusion of

phosphate conversion coating as one of the "oily operations." Based on EPA's database for this proposal, EPA believes that wastewater generated from phosphate conversion coating operations contains high levels of zinc and manganese.

If a facility discharges wastewater from any of the above listed operations but also discharges wastewater from other MP&M operations, it does not meet the criteria of the Oily Wastes subcategory. Facilities in this subcategory are predominantly machine shops or maintenance and repair shops. EPA has determined that other MP&M unit operations generate metal-bearing wastewater or combination metal- and oil-bearing wastewater and require different treatment technology (i.e., chemical precipitation). EPA included wastewater from floor cleaning and testing operations based on review of the analytical data that confirmed little or no metals content in these two streams. This subcategory also includes state- and municipally-owned facilities only performing the listed operations.

Like the General Metals subcategory, the Oily Wastes subcategory may include a number of facilities from each of 17 of the 18 MP&M industrial sectors (i.e., all except the printed wiring board sector). (See Section III for a discussion on the general scope of today's proposal).

EPA estimates that there are approximately 28,500 indirect dischargers and 900 direct dischargers in the Oily Wastes subcategory. EPA has concluded that less than 1 percent of the MP&M process wastewater discharged from facilities in this subcategory are covered by an existing effluent guideline.

For the reasons stated in Section XII, EPA is proposing to exclude from the MP&M regulations indirect discharging facilities that would fall into the Oily Wastes subcategory when they discharge less than or equal to 2 MGY of MP&M process wastewater to the POTW. EPA is also seriously considering a higher flow cutoff of 3 MGY for these indirect dischargers. See Sections IX, XI, XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Oily Wastes subcategory.

7. Railroad Line Maintenance

EPA has developed the Railroad Line Maintenance subcategory to cover facilities that perform routine cleaning and light maintenance on railroad engines, cars, and car-wheel trucks and similar parts or machines. More specifically these facilities only discharge wastewater from MP&M unit

operations that EPA defines as oily operations (see Section VI.C.6, above) and/or washing of final product. For other primarily oily subcategories (oily wastes and shipbuilding dry docks), EPA does not consider the unit operation "washing of final product" an MP&M "oily" operation; however, EPA has reviewed the analytical wastewater sampling data for this wastestream at railroad line maintenance facilities and determined that there is little or no metal content. This subcategory does not include railroad manufacturing facilities or railroad overhaul or heavy maintenance facilities. Railroad line maintenance facilities are similar to facilities in the Oily Wastes subcategory in that they produce oil-bearing wastewater and do not perform MP&M operations that generate wastewater that require metals removal treatment technology.

EPA estimates that there are approximately 800 indirect dischargers and 35 direct dischargers in the Railroad Line Maintenance subcategories. The wastewater generated at railroad line maintenance facilities contains very low levels of metals and toxic organic pollutants. For the reasons discussed in Section XII, EPA is proposing to exclude wastewater from indirect discharging railroad line maintenance facilities from the MP&M regulations. However, EPA is proposing to regulate conventional pollutants for direct dischargers in this subcategory. See Sections IX, XI, and XII of this preamble for information on compliance costs, pollutant reductions, and economic impacts for the Railroad Line Maintenance subcategory.

8. Shipbuilding Dry Dock

EPA has created the Shipbuilding Dry Dock subcategory to specifically cover MP&M process wastewater generated in or on dry docks and similar structures such as graving docks, building ways, marine railways and lift barges at shipbuilding facilities (or shipyards). Shipbuilding facilities use these structures to perform maintenance, repair or rebuilding of existing ships, or the final assembly and launching of new ships (including barges). Shipbuilders use these structures to reach surfaces and parts that would otherwise be under water. Since dry docks and similar structures include sumps or containment systems, they also enable shipyards to control the discharge of pollutants to the surface water. Typical MP&M operations that occur in dry docks and similar structures include: abrasive blasting, hydroblasting, painting, welding, corrosion preventive coating, floor cleaning, aqueous degreasing, and testing (e.g., hydrostatic

testing). Not all of these unit operations generate wastewater. EPA is also proposing to cover wastewater generated when a shipyard cleans a ship's hull in a dry dock (or similar structure) for removal of marine life (e.g., barnacles) only when in preparation for performing MP&M operations. EPA discusses typical MP&M unit operations in Section III.

EPA is proposing that this subcategory only cover wastewater generated from MP&M operations that occur in or on these structures. The Agency is not including MP&M process wastewater that is generated at other locations at the shipyard ("on-shore" operations) in this proposed subcategory. EPA expects that wastewater from these "on-shore" shipbuilding operations (e.g., electroplating, plasma arc cutting) will fall under either the General Metals or Oily Wastes subcategories of the proposed MP&M regulation. Also, EPA is not including wastewater generated on-board ships when they are afloat (i.e., not in dry docks or similar structures). For U.S. military ships, EPA is in the process of establishing standards to regulate discharges of wastewater generated on-board these ships when they are in U.S. waters and are afloat under the Uniform National Discharge Standards (UNDS) pursuant to section 312(n) of the CWA. (See 64 FR 25125, May 10, 1999). However, when ships are located in dry docks or similar structures, EPA is proposing to cover process wastewater generated and discharged from MP&M operations inside and outside the vessel (including bilge water).

EPA identified three other types of water streams in or on dry docks and similar structures: flooding water, dry dock ballast water, and storm water. Flooding water enters and exits the dry dock or similar structure prior to performing any MP&M operations. For example, in a graving dock, the gates are opened allowing flooding water in and ships to float inside the chamber. Then the flooding water is drained, leaving the ship's exterior exposed so shipyard employees can perform repair and maintenance on the ship's hull. Dry dock ballast water serves a similar purpose. It is used to lower (or sink) the dry dock so that a ship can float over it. Then the dry dock ballast water is pumped out, raising the dry dock with the ship on top. Finally, since these structures are located outdoors and are exposed to the elements, storm water may fall in or on the dry dock or similar structures. EPA is proposing to exclude all three of these water streams from the MP&M regulation. Flooding water and

dry dock ballast water do not come into contact with MP&M operations. In addition, EPA has determined that storm water at these facilities is covered by EPA's recent Storm Water Multi-Sector General permit, similar general permits issued by authorized states, and individual storm water permits. In general, storm water permits at shipyards include best management practices (BMPs) that are designed to prevent the contamination of storm water. For example, these practices include sweeping of areas after completion of abrasive blasting or painting. If EPA were to cover storm water in dry docks (or similar structures) under today's proposed rule, it would be unlikely that EPA would set numerical limits similar to those it is proposing for process wastewater. Most likely, EPA would set BMPs similar to those currently used in the storm water permits. Therefore, in an effort to avoid duplication of coverage, EPA is not covering storm water in dry docks (or similar structures) under today's proposal.

EPA estimates that there are 6 indirect dischargers and 6 direct dischargers in the Shipbuilding Dry Dock subcategory. The Agency notes that many shipbuilders operate multiple dry docks (or similar structures) and that this is the number of estimated facilities (not dry docks) that discharge MP&M process wastewater from dry docks (and similar structures). Many shipyards only perform dry MP&M unit operations in their dry docks (and similar structures) or do not discharge wastewater generated in dry docks (and similar structures) from MP&M unit operations. Many shipyards prefer to handle this wastewater as hazardous, and contract haul it off-site due to the possible presence of copper (used as anti-foulant) in paint chips from abrasive blasting operations. EPA has determined that shipyards currently discharging MP&M wastewater from dry docks have oil/water separation technology in place, such as dissolved air flotation (DAF).

The wastewater discharged from dry docks and similar structures contains very low levels of metals and toxic organic pollutants. For the reasons discussed in Section XII, EPA is proposing to exclude wastewater from indirect discharging dry docks and similar structures at shipbuilding facilities from the MP&M regulations. However, EPA is proposing to regulate conventional pollutants for direct dischargers in this subcategory. See Sections IX, XI, and XIII of this preamble for information on compliance costs, pollutant reductions, and

economic impacts for the Shipbuilding Dry Dock subcategory.

VII. Water Use and Wastewater Characteristics

A. Wastewater Sources and Characteristics

EPA classified the MP&M unit operations into the following three groups depending on their water use and discharge: (1) Unit operations that typically use process water and discharge process wastewater; (2) unit operations that typically either do not use process water or use process water but do not discharge wastewater; and (3) miscellaneous operations reported in the MP&M questionnaires by fewer than five respondents.

Process wastewater includes any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw materials, intermediate products, finished products, by-products, or waste products. Process wastewater includes wastewater from wet air pollution control devices. For the purposes of the MP&M regulation, EPA does not consider non-contact cooling water or storm water a process wastewater nor does it consider non-aqueous wastes used as processing liquids, such as spent solvents or quench oil, as process wastewater. (See Section III for detailed discussion on general applicability of today's proposed rule).

Wastewater from the operations that use process water have different characteristics depending on the unit operation from which they are derived. EPA discusses the five different types of MP&M process wastewater below. First, oil-bearing wastewater is typically generated from the use of metal shaping coolants and lubricants, surface preparation solutions used to remove oil and dirt from components, and associated rinses. Some examples of oil-bearing wastewater are: Machining and grinding coolants and lubricants; pressure and impact deformation lubricants; dye penetrant and magnetic flux testing; and alkaline cleaning solutions and rinses used to remove oil and dirt. This wastewater typically requires preliminary treatment to remove oil and grease. The most common type of treatment for oil-bearing wastewater is chemical emulsion breaking followed by gravity separation and oil skimming. EPA also identified MP&M facilities that used membrane separation technologies for oil and grease removal.

Second, hexavalent chromium-bearing wastewater typically consists of

concentrated surface preparation or metal deposition solutions, sealants, and associated rinses. Some examples of hexavalent chromium-bearing wastewater are: Chromic acid treatment solutions and rinses; chromate conversion coating solutions and rinses; and chromium electroplating solutions and rinses. This wastewater typically requires preliminary treatment to reduce the hexavalent chromium to trivalent chromium for subsequent chemical precipitation and settling. Typically, MP&M facilities use sodium metabisulfite or gaseous sulphur dioxide as reducing agents in the reduction of hexavalent chromium-bearing wastewater.

Third, many surface preparation or metal deposition solutions and their associated rinses generate process wastewater that contains cyanide. Two examples of cyanide-bearing wastewater are: Cyanide-bearing alkaline treatment solutions and rinses (typically used as a surface treatment step prior to electroplating with cyanide solutions) and cyanide-bearing electroplating solutions and rinses. This wastewater typically requires preliminary treatment to destroy cyanide and facilitate subsequent chemical precipitation and settling. MP&M facilities most often use sodium hypochlorite for the destruction of cyanide by alkaline chlorination.

Fourth, concentrated surface preparation or metal deposition solutions and their associated rinses can generate process wastewater that contain complexed or chelated metals. In particular, electroless plating operations and their rinses typically produce this type of wastestream. This wastewater requires preliminary treatment to break and/or precipitate the complexes for subsequent chemical precipitation and settling. MP&M facilities typically use sodium borohydride, hydrazine, sodium hydrosulfite, or sodium dimethyldithiocarbamate (DTC) as reducing and precipitating agents in this preliminary treatment process.

For the MP&M proposal, EPA based the estimated costs and pollutant removals associated with the treatment of chelated or complexed metals on the use of DTC. When DTC is used appropriately, it may effectively enhance the removal of some difficult to treat pollutants without impacting the environment or POTW operations. However, DTC is toxic to aquatic life and to activated sludge and thus can upset POTW operations. DTC can combine to form, or break down to, a number of other toxic chemicals, including thiram and ziram (both EPA registered fungicides) and other

thiurams, other dithiocarbamates, carbon disulfide, and dimethylamine. EPA's pollutant of concern list (see below for a description of the development of this list) contained ziram, carbon disulfide, and N-nitrosodimethylamine. Ziram is known to be toxic to aquatic life at the following levels: LC50 less than 10 ug/L (parts per billion) for several varieties of bluegill and trout; LC 50 between 10 and 100 ug/L in other studies (AQUIRE data base at <http://www.epa.gov/medecotx/quicksearch.htm>.) EPA solicits comment on the use of DTC for the treatment of chelated wastewater and its potential harmful effects on the environment and on POTW operations. The Agency is particularly interested in receiving data and information on alternative treatments for wastewater containing chelated or complexed metals.

Finally, virtually all MP&M process wastewater contains some metallic pollutants. Metal shaping solutions, surface preparation solutions, metal deposition solutions, and surface finishing solutions typically produce the most concentrated metal-bearing wastewater. MP&M facilities most commonly use chemical precipitation (usually with either lime or sodium hydroxide) and settling for metals removal. Many facilities also use coagulants and flocculants to assist chemical precipitation and settling.

As discussed in Section V.C, EPA conducted wastewater sampling episodes at 71 MP&M facilities to obtain data on the characteristics of MP&M wastewater and solid wastes, and to assess the following: the loading of pollutants to surface waters and POTWs from MP&M sites; the effectiveness of technologies designed to reduce and remove pollutants from MP&M wastewater; and the variation of MP&M wastewater characteristics across unit operations, metal types processed in each unit operation, and sectors. Although EPA analyzed the wastewater from these facilities for approximately 324 pollutant parameters (including conventional, nonconventional, and priority pollutants), it did not consider all of these pollutants for potential regulation. Rather, EPA reduced the list to 132 pollutants (referred to as pollutants of concern or POCs) for further consideration by retaining only those pollutants that met the following criteria:

- EPA detected the pollutant parameter in at least three samples collected during the MP&M sampling program.
- The average concentration of the pollutant parameter in samples of

wastewater from MP&M unit operations and influents-to-treatment was at least five times the minimum level (ML) or the average concentration of effluent-from-treatment wastewater samples exceeded five times the minimum level. EPA defines the ML as "the lowest level at which the entire analytical system must give a recognizable signal and an acceptable calibration point for the analyte." (Development Document for Final Effluent Limitations Guidelines and Standards for the Centralized Waste Treatment Industry. U.S. EPA).

- EPA analyzed the pollutant parameter in a quantitative manner following the appropriate quality assurance/quality control (QA/QC) procedures. To meet this criteria, the Agency excluded wastewater analyses performed solely for certain semi-quantitative "screening" purposes. EPA performed these semi-quantitative analyses only in unusual cases (*e.g.* to qualitatively screen for the presence of a rare metal such as osmium).

From the list of 132 pollutants that passed the editing criteria above, EPA selected the regulated pollutants for each subcategory. See Section 7 of the technical development document for more information on the selection of pollutants to regulate. The Agency also used the pollutant parameters on the POC list to calculate the pollutant removals for each technology option.

B. Pollution Prevention, Recycle, Reuse and Water Conservation Practices

The data gathered to support this rule indicate that a number of pollution prevention and water conservation practices exist in the MP&M industry. EPA determined that some of these pollution prevention, recycling, and water conservation practices were broadly applicable to the MP&M category and included these in the technology options (see Section VIII.A).

A large number of additional pollution prevention practices were site specific and could not be used as the basis for a national standard. However, EPA considers it important to make this site-specific pollution prevention information available for possible use by MP&M sites. Therefore, the Technical Development Document (TDD) contains a summary of the pollution prevention practices identified during the development of this rule. EPA also collected data on water use and wastewater generation at facilities employing pollution prevention and good water use practices. The TDD contains this data and discusses the applicability of the more prevalent pollution practices identified in this category (*e.g.*, drag-out reduction, flow

reduction, coolant and paint curtain recycling). EPA is soliciting comment and data on any of the pollution prevention, recycle, reuse and water conservation practices that it discusses in the TDD as well as additional information about these types of technologies that EPA did not discuss in the TDD. In addition, EPA is requesting data and comment on its flow data from facilities with pollution prevention and good water use practices in place. See Section XXI.D for a discussion on a pollution prevention alternative that EPA is considering for facilities in the Metal Finishing Job Shops subcategory.

VIII. Development of Effluent Limitations Guidelines and Standards

A. Overview of Technology Options

In developing its technology options, EPA determined that a different set of wastewater treatment technologies was appropriate for facilities that performed unit operations that produced primarily metal-bearing wastewater than for those facilities that performed unit operations that produced primarily oily wastes (see Section VI.C.6 for list of the unit operations that generate primarily oily only wastewater). EPA concluded that the following subcategories typically produce metal-bearing wastewater (with or without associated oily-bearing wastestreams) and evaluated metals control technologies for these subcategories: General Metals, Metal Finishing Job Shops, Non-Chromium Anodizing, Printed Wiring Boards, and Steel Forming and Finishing. For the remaining subcategories (Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Docks), EPA evaluated oily wastewater treatment technologies. The following sections discuss the wastewater treatment technologies that EPA evaluated for each subcategory at each regulatory level (BPT, BAT, PSES, NSPS, and PSNS). See Section VI for a discussion on subcategorization.

1. Wastewater Treatment Technologies for Metal-Bearing Wastewater

MP&M facilities in the General Metals subcategory, the Metal Finishing Job Shops subcategory, the Non-Chromium Anodizing subcategory, the Printed Wiring Board subcategory, and the Steel Forming and Finishing subcategory produce primarily metal-bearing wastewater. EPA evaluated the following four wastewater treatment technology options for the MP&M industry subcategories whose unit operations produce metal-bearing wastewater (and may also produce oily wastewater):

Option 1. Segregation of wastewater streams, preliminary treatment steps as necessary (including oils removal using oil-water separation by chemical emulsion breaking), chemical precipitation using lime or sodium hydroxide, and sedimentation using a clarifier.

Option 1, as well as each of the three other options considered by EPA for the metal-bearing wastewater subcategories, includes the segregation of wastestreams and preliminary treatment of certain wastestreams. Segregation of wastewater and subsequent preliminary treatment allows for the most efficient, effective, and economic means for removing pollutants in certain wastestreams. For example, if a facility segregates its oil-bearing wastewater from its metal-bearing wastewater, then the facility can design an oil removal treatment technology based on only the oily waste flow volume and not on the combined metal-bearing and oil-bearing wastewater flow. Therefore, preliminary treatment technologies are more effective and less costly on segregated wastestreams, prior to adding wastewater that does not contain the pollutants being treated with the preliminary treatment. EPA includes these preliminary treatment steps, as applicable whenever it refers to chemical precipitation and sedimentation treatment.

As mentioned previously in Section VII (Water Use and Wastewater Characteristics), unit operations performed at MP&M sites produce wastewater with varying characteristics (*i.e.*, oil-bearing, hexavalent chromium-bearing, cyanide-bearing, complexed metals). Wastewater with these characteristics requires preliminary treatment before the chemical precipitation step for metals removal. EPA included the following preliminary steps in Option 1 for the metal-bearing wastewater subcategories: removal of oil and grease through chemical emulsion breaking, gravity separation, and oil skimming; destruction of cyanide using sodium hypochlorite; reduction of hexavalent chromium to trivalent chromium which can subsequently be precipitated as a chromium hydroxide; and chemical reduction/precipitation of chelated or complexed metals. EPA has also included the contract hauling of any wastewater associated with organic solvent degreasing as part of the Option 1 technology.

Option 1 consists of preliminary treatment for specific pollutants and end-of-pipe treatment with chemical precipitation (usually accomplished by raising the pH with an alkaline chemical such as lime or sodium hydroxide, also

known as caustic, to produce insoluble metal hydroxides) followed by clarification and sludge dewatering. This treatment has been widely used throughout the metals industry and is well documented to be effective for removing metal pollutants. As with a number of previously promulgated regulations, EPA is proposing BPT on the basis that all process wastewater, except solvent-bearing wastewater, will be treated through chemical precipitation and clarification end-of-pipe treatment.

Option 1 treatment systems (chemical precipitation with gravity clarification) sampled by EPA demonstrated effective removal for targeted metals. (Targeted metals are those metals that an MP&M facility was operating its wastewater treatment system to remove.)

Option 2. In-process flow control and pollution prevention, segregation of wastewater streams, preliminary treatment steps as necessary (including oils removal using oil-water separation by chemical emulsion breaking), chemical precipitation using lime or sodium hydroxide, and sedimentation using a clarifier.

Option 2 builds on Option 1 by adding in-process pollution prevention, recycling, and water conservation methods which allow for recovery and reuse of materials. As discussed in Section VII.B, techniques or technologies, such as centrifugation or skimming for metal working fluids, or water paint curtains, may in some cases save money for companies by allowing materials to be used over a longer period before they need to be disposed. Using these techniques along with water conservation also leads to the generation of less pollution and results in more effective treatment of the wastewater that is generated. The incorporation of pollution prevention practices can lead to smaller wastewater flows and increased pollutant concentrations. However, the treatment of metal-bearing wastewater by chemical precipitation is relatively independent of influent metal concentration. For example, a well-operated chemical precipitation and clarification treatment system can achieve the same effluent concentration with an influent stream of 1,000 gallons per minute (gpm) and 10 parts per million (ppm) as it can achieve with an influent stream which is 500 gpm and 20 ppm. In fact, within a broad range of influent concentrations, the more highly concentrated wastewater influent, when treated down to the technology effectiveness concentrations of a chemical precipitation and clarification treatment system, results in better pollutant removals and less mass of

pollutant in the discharge. In addition, the cost of a treatment system is largely dependent on the size, which in turn is largely dependent on flow. As a result, good recycle and water conservation practices may result in cost savings, though there may also be associated cost increases, depending on site specific factors (e.g., costs associated with capital investment for pollution prevention equipment). Option 2 in-process pollution prevention and water conservation technologies include:

- Flow reduction using flow restrictors, conductivity meters, and/or timed rinses, for all flowing rinses, plus countercurrent cascade rinsing for all flowing rinses;
- Centrifugation and recycling of painting water curtains; and
- Centrifugation and pasteurization to extend the life of water-soluble machining coolants reducing discharge volume.

Option 3. Segregation of wastewater streams, preliminary treatment steps as necessary (including oils removal by ultrafiltration), chemical precipitation using lime or sodium hydroxide, and solids separation using a microfilter.

This option differs from Option 1 in that an ultrafilter replaces the oil water separator for the removal of oil and grease and a microfilter, rather than a clarifier, follows chemical precipitation. EPA determined through sampling episodes that ultrafiltration systems are very effective for the removal of oil and grease at MP&M facilities. Ultrafilters sampled by EPA demonstrated effective removal of oil and grease. Additionally, EPA also collected treatment effectiveness data for solids removal after chemical precipitation through microfiltration. Microfilters sampled by EPA at MP&M facilities achieved long-term average effluent concentrations for targeted metals that were, in several cases, an order of magnitude lower than the long-term averages achieved by Option 2.

Option 4. In-process flow control and pollution prevention, segregation of wastewater streams, preliminary treatment steps as necessary (including oils removal by ultrafiltration), chemical precipitation using lime or sodium hydroxide, and solids separation using a microfilter.

This option builds on Option 3 by adding in-process pollution prevention, recycling, and water conservation methods which allow for recovery and reuse of materials. EPA included the same water conservation and pollution control technologies in Option 4 as in Option 2.

For all of the subcategories with metal-bearing wastewater, EPA

determined that Option 2 costed less than Option 1 and demonstrated greater pollutant removals. Likewise, for all subcategories with metal-bearing wastewater, Option 4 costed less than Option 3 and demonstrated greater pollutant removals. As discussed above, the incorporation of water conservation and pollution prevention technologies results in greater pollutant removals and less mass of pollutant in the discharge. In addition, the cost of a treatment system is largely dependent on the size, which in turn is largely dependent on flow. As a result, Options 2 and 4, which include water conservation and pollution prevention, have smaller flows requiring treatment and are projected to cost less than Options 1 and 3, respectively. Therefore, for the remainder of the discussions in this preamble regarding technology options for subcategories with metal-bearing wastewater, EPA only considers Options 2 and 4. The Agency has fully evaluated Options 1 and 3, and a discussion of the results of this evaluation is contained in the Technical Development Document. EPA requests comment on its determination that pollution prevention, recycle and water conservation result in net cost savings to facilities, and examples of any specific situations where this may not be true.

2. Wastewater Treatment Technologies for Oily Wastewater

MP&M facilities in the Oily Wastes subcategory, the Railroad Line Maintenance subcategory, and the Shipbuilding Dry Dock subcategory produce primarily oil-bearing wastewater. EPA evaluated the following six wastewater treatment technology options for the MP&M industry subcategories whose unit operations produce only oily wastewater (see Section VI.C.6 for a discussion of oily unit operations):

Option 5. Oil-water separation by Chemical Emulsion Breaking.

Chemical emulsion breaking is used to break stable oil/water emulsions (oil dispersed in water, stabilized by electrical charges and emulsifying agents). A stable emulsion will not separate or break down without chemical treatment. Chemical emulsion breaking is applicable to wastewater streams containing emulsified coolants and lubricants such as machining and grinding coolants and impact or pressure deformation lubricants as well as cleaning solutions that contain emulsified oils.

Treatment of spent oil/water emulsions involves using chemicals to break the emulsion followed by gravity differential separation. The major

equipment required for chemical emulsion breaking includes reaction chambers with agitators, chemical storage tanks, chemical feed systems, pumps and piping. Factors to be considered for destroying emulsions are type of chemicals, dosage and sequence of addition, pH, mixing, heating requirements, and retention time. EPA describes this technology option in more detail in Section 8 of the Technical Development Document.

In an effort to evaluate this technology option, EPA performed sampling episodes at several facilities in the Oily Wastes subcategory that employed chemical emulsion breaking followed by gravity separation and oil skimming.

Option 6. In-process Flow Control, Pollution Prevention, and Oil-water separation by chemical emulsion breaking.

This option builds on Option 5 by adding in-process pollution prevention, recycling, and water conservation methods which allow for recovery and reuse of materials. EPA included the same pollution prevention techniques or technologies discussed in Option 2 such as flow reduction and reuse, paint curtain recycling and/or recirculation, and coolant recycling, as applicable.

Option 7. Oil-water separation by ultrafiltration.

In the MP&M industry, ultrafiltration is applied in the treatment of oil/water emulsions. In ultrafiltration, a semi-permeable microporous membrane performs the separation. Wastewater is sent through membrane modules under pressure. Water and low-molecular-weight solutes (for example, salts and some surfactant) pass through the membrane and are removed as permeate. Emulsified oil and suspended solids are rejected by the membrane and are removed as concentrate. The concentrate is reticulated through the membrane unit until the flow of the permeate drops. The permeate may either be discharged or passed along to another treatment unit. The concentrate is contained and held for further treatment or disposal. EPA describes this technology option in more detail in Section 8 of the Technical Development Document.

In an effort to evaluate this technology option, EPA performed sampling episodes at several facilities in the Oily Wastes subcategory that employed ultrafiltration. EPA also collected data on ultrafiltration systems at metal-bearing facilities which segregated their oily wastestreams for treatment.

Option 8. In-process Flow Control, Pollution Prevention, and Oil-water separation by Ultrafiltration.

This option builds on Option 7 by adding in-process pollution prevention, recycling, and water conservation methods which allow for recovery and reuse of materials. EPA included the same water conservation and pollution control technologies in Option 8 as in Option 6.

Option 9. Oil-water Separation by Dissolved Air Flotation.

Dissolved air flotation (DAF) is commonly used to remove suspended solids and dispersed oil and grease from oily wastewater. DAF is the process of using fine bubbles to induce suspended particles to rise to the surface of a tank where they can be collected and removed. The major components of a conventional DAF unit include a centrifugal pump, a retention tank, an air compressor, and a flotation tank. EPA describes this technology option in more detail in Section 8 of the Technical Development Document.

In an effort to evaluate this technology option, EPA performed sampling episodes at several facilities in the Railroad Line Maintenance and Shipbuilding Dry Dock subcategories that employed dissolved air flotation (DAF). EPA compared the effluent concentrations achieved by these DAF systems to effluent concentration achieved by DAF systems in other industry categories (e.g., industrial laundries).

Option 10. In-process Flow Control, Pollution Prevention, and Oil-water separation by Dissolved Air Flotation.

This option builds on Option 9 by adding in-process pollution prevention, recycling, and water conservation methods which allow for recovery and reuse of materials. EPA included the same water conservation and pollution control technologies in Option 10 as in Option 6 and 8.

For all of the subcategories with only oily wastewater, EPA determined that the options that involved water conservation and pollution prevention costed less and removed more pollutant than those options that did not include these technologies or techniques. As discussed above, the incorporation of water conservation and pollution prevention technologies results in greater pollutant removals and less mass of pollutant in the discharge. In addition, the cost of a treatment system is largely dependent on the size, which in turn is largely dependent on flow. As a result, Options 6, 8, and 10, which all include water conservation and pollution prevention, cost less than their counterpart options (Options 5, 7, and 9, respectively) that did not include these pollution prevention technologies or techniques. Therefore, for the

remainder of the discussions in this preamble regarding technology options for subcategories with oily wastewater, EPA only considers Options 6, 8, and 10. However, the Agency fully evaluated Options 5, 7, and 9, and discusses the results of this evaluation in the Technical Development Document.

B. Determination of Long-Term Averages, Variability Factors, and Limitations

1. Overview of Limitations Calculations

EPA visited over 200 facilities and sampled wastewater from 71 MP&M facilities covering all the industrial sectors covered by this proposed rule. (See Section III for a discussion on applicability). In addition to sampling to characterize the process wastewater, EPA sampled 46 end-of-pipe chemical precipitation and clarification treatment systems, 5 microfilters, 5 oil-water emulsion breaking and gravity separation systems, 16 ultrafilters, and 4 chemical emulsion breaking and DAF systems. EPA reviewed the treatment data gathered and identified data considered appropriate for calculating limitations for the MP&M industry. EPA identified data from well-designed and well-operated treatment systems and focused on data for specific pollutants processed and treated on site. The data editing procedures used for this assessment consisted of four major steps:

- Assessment of the performance of the entire treatment system;
 - Identification of process upsets during sampling that impacted the treatment effectiveness of the system;
 - Identification of pollutants not present in the raw wastewater at sufficient concentrations to evaluate treatment effectiveness; and
 - Identification of treatment chemicals used in the treatment system.
- EPA describes the evaluation criteria used for each of these steps below. The Agency excluded data that failed one or more of the evaluation criteria from calculation of the limitations.

Assessment of Treatment System Performance. EPA assessed the performance of the entire treatment system during sampling. The Agency excluded data for systems identified as not being well-designed or well-operated from use in calculating BPT limitations. EPA first identified the metals processed on site, as well as if the site performed unit operations likely to generate oil and grease and cyanide. EPA focused on these pollutants because MP&M facilities typically design and operate their treatment systems to treat and remove these

pollutants. EPA then performed the following technical analyses of the treatment systems:

- Based on the pollutants processed or treated on site, EPA excluded data from systems that were not operated at the proper pH for removal of the pollutants.
- EPA excluded data from chemical precipitation and clarification systems that did not have solids removal indicative of effective treatment. In general, EPA identified as having poor solids removal systems that did not achieve at least 90 percent removal of total suspended solids (TSS) and had effluent TSS concentrations greater than 50 milligrams per liter. EPA made site-specific exceptions to this rule.
- EPA excluded data from chemical precipitation and clarification systems at which the concentration of most of the metals present in the influent stream did not decrease, indicating poor treatment.

Although EPA believes this is an appropriate practice, in order to focus on facilities with well-run treatment systems, it also introduces a risk of biasing estimates of treatment effectiveness upwards with respect to identifying pollutant removals on a national basis. If a particular metal is not able to be effectively removed by a particular treatment train, but its concentration fluctuates randomly over time in both the influent and the effluent, then retaining only data showing positive “removals” may give a misleading impression of effectiveness of that treatment technology nationally. Some commenters have raised this issue in the past particularly with respect to boron, which those commenters believe is not effectively removed by certain treatment trains where EPA’s data (edited to include only decreases) appears to show removals. EPA is continuing to assess this concern both with regards to metals in general and with regards to boron in particular. EPA requests comment on this issue and suggestions for addressing it. EPA is planning to do a re-analysis of its estimates of its baseline load and removals for boron and will provide results of this analysis when available. This analysis will be placed in Section 6.8 of the public record.

Identification of Process Upsets Occurring During Sampling. EPA reviewed the sampling episode reports for each of the sampled sites and identified any process upsets that resulted in poor treatment during one or more days of the sampling episode. EPA

excluded the data affected by the process upsets.

Identification of Pollutants Not Present in the Raw Wastewater at Sufficient Concentrations to Evaluate Removal. EPA excluded data for pollutants that it did not detect in the treatment influent streams at a sampled facility, or it detected at concentrations less than 10 times the minimum level. Because these proposed limitations are technology-based, EPA requires that a facility must demonstrate pollutant removal through treatment in order for that data to be used in the calculation of effluent limitations. Therefore, the Agency determined that for a BPT/BAT facility to demonstrate effective treatment, the pollutant must be present in the wastewater at a treatable concentration—which EPA defined as 10 times the minimum level for this proposal. EPA also excluded data for pollutants that were not processed on site. In addition, EPA reviewed the water use practices for the sampled sites and excluded data from sites that may have been diluting the raw wastewater and reducing the concentration of pollutants processed on site. Because these proposed MP&M effluent guidelines include water conservation practices and pollution prevention technologies, EPA reviewed the data to ensure that the facilities it used as the basis for BPT limitations had these practices and technologies in place.

Identification of Wastewater Treatment Chemicals. EPA identified treatment chemicals used in each of the sampled treatment systems to determine if the removal of the metals used as treatment chemicals were consistent with removal of other metals on site, indicating a well-designed and well-operated system. If a sampled facility used a metal as a treatment chemical, and the facility treated the metal to a concentration consistent with other metals removed on site, EPA included the metal in calculation of the BPT limitations. If the sampled facility used a metal as a treatment chemical and the treatment system did not remove it to a concentration consistent with other metals removed on site, EPA excluded the treatment chemical from calculation of the limitations. (Note that this practice may raise similar concerns to those discussed above with respect to editing out data that do not show positive removals.) The Agency used the data remaining after these data editing procedures to calculate the limitations.

Calculation of Limitations

The Technical Development Document and the Statistical Support Document contain a detailed

description of the statistical methodology used for the calculation of limitations. EPA based the effluent limitations and standards in today’s notice on widely-recognized statistical procedures for calculating long-term averages and variability factors. The following presents a summary of the statistical methodology used in the calculation of effluent limitations.

Effluent limitations for each subcategory are based on a combination of long-term average effluent values and variability factors that account for variation in day-to-day treatment performance within a treatment plant. The long-term averages are average effluent concentrations that have been achieved by well-operated treatment systems using the proposed treatment technologies described in Section VIII. The purpose of the variability factor is to allow for normal variation in effluent concentrations. A facility that designs and operates its treatment system to achieve a long-term average on a consistent basis should be able to comply with the daily and monthly limitations in the course of normal operations.

EPA developed the variability factors and long-term averages from a database composed of individual measurements on treated effluent based on EPA sampling data. EPA sampling data reflects the performance of a system over a three to five day period, although not necessarily over consecutive days.

EPA performed the following steps in order to calculate the proposed limitations for each pollutant. For each subcategory, EPA calculated the arithmetic long-term average concentration of a pollutant for each facility representing the proposed treatment technology, and determined the median from the arithmetic average concentrations. For each pollutant, this median concentration is the long-term average (LTA) concentration that EPA used in determining the proposed effluent limitations.

The Agency then used the modified delta-lognormal distribution to estimate daily and monthly variability factors. This is the same distributional model used by EPA in the final rulemakings for the Pulp and Paper and Centralized Waste Treatment. The modified delta-lognormal distribution models the data as a mixture of non-detect observations and measured values. EPA selected this distribution because the data for most analytes consisted of a mixture of measured values and non-detects. The modified delta-lognormal distribution assumes that all non-detects have a value equal to the sample specific

detection limit and that the detected values follow a lognormal distribution.

The Agency fit the daily concentration data from each facility that had enough detected concentration values for parameter estimation to a modified delta lognormal distribution. The daily variability factor for each pollutant at each facility is the ratio of the estimated 99th percentile of the distribution of the daily pollutant concentration values divided by the expected value of the distribution of the daily values. (EPA assumed that the furthest excursion from the LTA that a well-operated plant using the proposed technology option could be expected to make on a daily basis was a point below which 99 percent of the data for that facility falls, under the assumed distribution.) The pollutant daily variability factor for a treatment technology is the average of the pollutant daily variability factors from the facilities with that technology. EPA calculates the daily maximum limitation as the product of the pollutant LTA concentration and the daily variability factor.

The Agency calculates the monthly maximum limitation in much the same way. However, it bases the variability factor (known as the monthly variability factor) on the 95th percentile of the distribution of four-day average pollutant concentrations instead of the 99th percentile. Therefore, the monthly variability factor for each pollutant at each facility is the estimated 95th percentile of the distribution of the 4-day average pollutant concentration values divided by the expected value of the distribution of the daily values. The pollutant monthly variability factor for a treatment technology is the average of the pollutant monthly variability factors from the facilities with that technology. EPA calculates the maximum monthly average limitation as the product of the pollutant LTA concentration and the monthly variability factor.

There were several instances where variability factors could not be calculated directly from the MP&M database because there were not at least two effluent values measured above the minimum detection level for a specific pollutant. In these cases, the sample size of the data is too small to allow

distributional assumptions to be made. Therefore, in order to assume a variability factor for a pollutant, the Agency transferred variability factors from other pollutants that exhibit similar treatability characteristics within the treatment system. The Technical Development Document and the Statistical Support Document provide detailed information on the transfer of variability factors.

IX. Best Practicable Control Technology Currently Available (BPT)

As discussed in Section II, in the guidelines for an industry category, EPA defines BPT effluent limits for conventional, toxic (priority), and non-conventional pollutants for direct discharging facilities. In specifying BPT, EPA looks at a number of factors. EPA first considers the cost of achieving effluent reductions in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Agency deems appropriate (CWA 304(b)(1)(B)). Traditionally, EPA establishes BPT effluent limitations based on the average of the best performances of facilities within the industry of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, EPA may require higher levels of control than currently in place in an industrial category if the Agency determines that the technology can be practically applied. See "A Legislative History of the Federal Water Pollution Control Act Amendments of 1972", U.S. Senate Committee of Public Works, Serial No. 93-1, January 1973, p. 1468.

In addition, CWA Section 304(b)(1)(B) requires a cost-reasonableness assessment for BPT limitations. In determining the BPT limits, EPA must consider the total cost of treatment technologies in relation to the effluent reduction benefits achieved. This inquiry does not limit EPA's broad discretion to adopt BPT limitations that are achievable with available technology unless the required additional

reductions are "wholly out of proportion to the costs of achieving such marginal level of reduction." See Legislative History, op. cit. p. 170. Moreover, the inquiry does not require the Agency to quantify benefits in monetary terms. See, for example, *American Iron and Steel Institute v. EPA*, 526 F.2d 1027 (3rd Cir., 1975). For the BPT cost-reasonableness assessment, EPA used the total pounds of COD removed for the General Metals, Metal Finishing Job Shops, Non-Chromium Anodizing, Steel Forming and Finishing, and Oily Wastes, and Railroad Line Maintenance subcategories because this parameter best represented the pollutant removals without counting removals of individual pollutants more than once. EPA used O&G for the cost-reasonableness assessment for the Shipbuilding Dry Dock subcategories because it best represented the pollutant removals for these subcategories without counting removals of individual pollutants more than once.

In balancing costs against the benefits of effluent reduction, EPA considers the volume and nature of expected discharges after application of BPT, the general environmental effects of pollutants, and the cost and economic impacts of the required level of pollution control. In past effluent limitations guidelines and standards, BPT cost-reasonableness has ranged from \$0.94/lb-removed to \$34.34/lb-removed in 1996 dollars. In developing guidelines, the Act does not require or permit consideration of water quality problems attributable to particular point sources, or water quality improvements in particular bodies of water. Therefore, EPA has not considered these factors in developing the limitations being proposed today. See *Weyerhaeuser Company v. Costle*, 590 F. 2d 1011 (D.C. Cir. 1978).

Table IX-1 below summarizes the pounds of pollutants removed for direct dischargers, and Table IX-2 summarizes the costs, costs per pound removed, and economic impacts for direct dischargers associated with each of the proposed options by subcategory. (See Section XII for summary tables for indirect dischargers.)

TABLE IX-1.—POUNDS OF POLLUTANTS REMOVED BY THE PROPOSED BPT OPTION FOR DIRECT DISCHARGERS BY SUBCATEGORY

Subcategory ¹ (number of facilities)	Selected option	TSS (lbs removed/ yr)	O&G (lbs removed/ yr)	COD (lbs removed/ yr)	Priority and nonconven- tional metals (lbs removed/ yr)	Priority and nonconven- tional organics (lbs removed/ yr)	Cyanide (lbs removed/ yr)
General Metals (3,794)	Option 2	10.1 million	7.8 million	181 million	4 million	5 million	184,000
Metal Finishing Job Shops (15) ²	Option 2	13,000	14,400	232,000	34,000	4,600	5,700

TABLE IX-1.—POUNDS OF POLLUTANTS REMOVED BY THE PROPOSED BPT OPTION FOR DIRECT DISCHARGERS BY SUBCATEGORY—Continued

Subcategory ¹ (number of facilities)	Selected option	TSS (lbs removed/ yr)	O&G (lbs removed/ yr)	COD (lbs removed/ yr)	Priority and nonconven- tional metals (lbs removed/ yr)	Priority and nonconven- tional organics (lbs removed/ yr)	Cyanide (lbs removed/ yr)
Printed Wiring Boards (11) ²	Option 2	51,000	238,000	1.3 million	172,000	22,000	1,400
Steel Forming and Finishing (43)	Option 2	884,000	101,000	4.5 million	387,000	76,000	1,100
Oily Waste (911)	Option 6	349,000	885,000	5.1 million	81,000	127,000	10
Railroad Line Maintenance (34)	Option 10	9,000	47,400	59,000	1,000	78	0
Shipbuilding Dry Dock (6)	Option 10	650	8.5 million	0	1,400	700	0

¹ EPA did not identify any direct discharging facilities in the Non-Chromium Anodizing subcategory; therefore, there are no estimated removals. See Section IX.C.

² Although EPA is not revising limits for TSS and O&G for these two subcategories, removals are reported based on incidental removals for the proposed MP&M Option 2 technology for BPT control of toxic and nonconventional pollutants.

EPA notes that the pounds removed presented in Table IX-1 may differ from the pounds removed presented in the Economic Analysis section (Section XVI). This difference is a result of the fact that when performing certain economic analyses (*e.g.*, cost-

effectiveness), the Agency does not include facilities (or the associated pollutant loadings and removals) that closed at the baseline (*i.e.*, EPA predicted that these facilities would close prior to the implementation of the MP&M rule). Table IX-1 above estimates

that annual pounds removed by the selected option for all of the direct discharging facilities in EPA's questionnaire data base that discharged wastewater at the time the data were collected.

TABLE IX-2.—ANNUALIZED COSTS AND ECONOMIC IMPACTS OF THE PROPOSED BPT OPTION FOR DIRECT DISCHARGERS BY SUBCATEGORY

Subcategory ¹ (number of facilities)	Selected option	Annualized compliance costs for selected option (\$1996)	Economic im- pacts (facility closures) of selected option (Per- cent of regu- lated sub- category)	BPT cost per pound removed ² (1996 \$/pound removed)
General Metals (3,794)	Option 2	230 million	20 (<1%)	1.22
Metal Finishing Job Shops (15)	Option 2	1.3 million	0	5.60
Printed Wiring Boards (11)	Option 2	2.5 million	0	1.92
Steel Forming and Finishing (43)	Option 2	29.3 million	0	6.51
Oily Waste (911)	Option 6	11.2 million	0	2.18
Railroad Line Maintenance (34)	Option 10	1.18 million	0	20.00
Shipbuilding Dry Dock (6)	Option 10	2.15 million	0	0.25

¹ EPA did not identify any direct discharging facilities in the Non-Chromium Anodizing subcategory; therefore, there are no estimated costs. See Section IX.C for estimates based on a model facility.

² EPA based the pounds used in calculating the BPT cost reasonableness on the COD removals only (shown in Table IX-1) for each subcategory, except for the use of oil and grease removals only (shown in Table IX-1) for the shipbuilding dry dock subcategory.

A. General Metals Subcategory

1. Need for BPT Regulation

EPA describes the General Metals subcategory in Section VI.C.1 of this preamble. The Agency estimates that there are approximately 3,800 direct discharging facilities in the General Metals subcategory. EPA estimates that the direct discharging facilities in the General Metals subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 8.2 million pounds per year of oil and grease, 10.9 million pounds per year of total suspended solids, 187 million pounds of COD, 5.2 million pounds per year of priority and nonconventional metal pollutants, 5.2 million pounds of priority and nonconventional organic pollutants, and 187,000 pounds per year

of cyanide. As a result of the quantity of pollutants currently discharged directly to the nation's waters by General Metals facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the General Metals subcategory generally perform unit operations such as cleaning, etching, electroplating, electroless plating, and conversion coating that produce metal-bearing wastewater. In addition, some of these facilities also perform machining and grinding, impact deformation, and surface preparation operations that generate oily wastewater. Therefore, EPA considered technology options 1 through 4 for this subcategory because technologies included in these options treat both oily wastewater as well as

metal-bearing wastewater. As explained above, EPA only discusses Options 2 and 4 in detail in this preamble since these options costed less and removed more pollutant than Options 1 and 3 (respectively). See Section VIII.A.1 for a discussion of technology options.

The Agency is proposing Option 2 as the basis for the new BPT regulation for the General Metals subcategory. EPA's decision to propose BPT limitations based on Option 2 treatment reflects primarily two factors: (1) The degree of effluent reductions attainable, and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the General Metals subcategory will directly

affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 2, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of COD removed. EPA estimates that implementation of Option 2 will cost \$1.22 per pound of COD removed (1996 \$). The Agency has concluded that the costs of BPT Option 2 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 2 represents the average of the best performing facilities due to the prevalence of chemical precipitation followed by sedimentation in this subcategory. Approximately 22 percent of the direct discharging facilities in the General Metals subcategory employ chemical precipitation followed by a clarifier (Option 2) while less than 1 percent employ microfiltration after chemical precipitation (Option 4).

Based on the available data base, Option 4 on an annual basis only removes an additional 66,000 pounds of TSS, 12,300 pounds of O&G, 15,000 pounds of priority metals, and 880,000 pounds of nonconventional metals, while removing 324,000 pounds less COD and 31,000 pounds less priority and nonconventional organic pollutants than Option 2. Although there is a large amount of additional removals of TSS and nonconventional metals for Option 4 when considered across the entire population (3,800 facilities), the Agency determined that these additional removals were not significant when considered on a per facility basis. In addition, Option 4's annualized cost is \$52 million more than Option 2. EPA concluded that the lack of significant additional pollutant removals per facility achieved by Option 4 (and the fact that it removes less COD and organic pollutants) support the selection of Option 2 as the BPT technology basis.

3. Calculation of BPT Limitations for the General Metals Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. In general, the Agency calculated BPT limitations for this subcategory using data from General Metals facilities employing Option 2 technology. For cyanide limitations, EPA used data from all subcategories where cyanide destruction systems were sampled. If data was not sufficient for

developing BPT limitations for an individual pollutant in this subcategory, the Agency transferred data from another subcategory (see the Technical Development Document for a more detailed discussion). See the proposed rule § 438.12 following this preamble for a list of the proposed BPT limitations for the General Metals Subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

B. Metal Finishing Job Shops Subcategory

1. Need for BPT Regulation

EPA describes the Metal Finishing Job Shops subcategory in Section VI.C.2 of this preamble. The Agency estimates that there are approximately 15 direct discharging facilities in the Metal Finishing Job Shops subcategory. EPA has previously promulgated BPT and BAT limitations for all of the facilities in this subcategory at 40 CFR part 413 (Electroplating Pretreatment Standards) and at 40 CFR part 433 (Metal Finishing Effluent Limitations Guidelines and Pretreatment Standards). However, EPA developed the existing regulations applicable to the facilities in the Metal Finishing Job Shops subcategory approximately 20 years ago, and since that time, advances in electroplating and metal finishing processes, water conservation, pollution prevention, and wastewater treatment have occurred. EPA is proposing new BPT effluent limitations guidelines for this subcategory.

EPA estimates that direct discharging facilities in the Metal Finishing Job Shops subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 17,900 pounds per year of oil and grease, 20,500 pounds per year of TSS, 287,400 pounds per year of COD, 44,000 pounds per year of priority and nonconventional metal pollutants, 6,000 pounds per year of priority and nonconventional organic pollutants, and 6,000 pounds per year of cyanide. As a result of the quantity of pollutants currently discharged directly to the nation's waters by metal finishing job shop facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the Metal Finishing Job Shops subcategory generally perform unit operations such as cleaning, etching, electroplating, electroless

plating, passivating, and conversion coating that produce metal-bearing wastewater. In addition, some of these facilities also perform machining and grinding, impact deformation, and surface preparation operations that generate oily wastewater. Therefore, EPA considered technology options 1 through 4 for this subcategory because technologies included in these options treat both oily wastewater as well as metal-bearing wastewater. As explained above, EPA only discusses Options 2 and 4 in detail in this preamble since these options costed less and removed more pollutant than Options 1 and 3, respectively.

The Agency is proposing Option 2 as the basis for BPT regulation for the Metal Finishing Job Shops subcategory. The new BPT limitations incorporate more stringent effluent requirements for priority metals, nonconventional pollutants, cyanide, and organic pollutants (by way of an indicator parameter) as compared to the limitations contained in 40 CFR 433.13. EPA has included the conventional pollutants, TSS and oil and grease, in the new BPT regulation for this subcategory at the same level as 40 CFR 433.13. EPA's decision to propose BPT limitations based on Option 2 treatment reflects primarily two factors: (1) The degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Metal Finishing Job Shop subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable. EPA based its decision not to revise the conventional pollutant limitations on the use of the alternate organics control parameters (*i.e.*, TOC or TOP) and the small additional removals of TSS obtainable after the incidental removal due to control of the metals.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 2, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of COD removed. EPA estimates that implementation of Option 2 will cost \$5.60 per pound of COD removed (1996\$). The Agency has concluded that the costs of BPT Option 2 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 2 represents the average of the best performing facilities due to the prevalence of chemical precipitation followed by sedimentation in the subcategory. The Agency estimates that 100 percent of the direct discharging facilities in the Metal Finishing Job Shops subcategory employ chemical precipitation followed by a clarifier (Option 2) while no facilities employ microfiltration after chemical precipitation (Option 4). Because no facilities in this subcategory employ microfiltration after chemical precipitation for solids separation, the Agency concluded that Option 4 does not represent the average of the best treatment.

Based on the available data base, Option 4 on an annual basis only removes an additional 6,900 pounds of priority and nonconventional metals, while removing 1,500 pounds less COD, and 600 pounds less priority and nonconventional organic pollutants than Option 2. EPA concluded that the lack of significant overall additional pollutant removals achieved by Option 4 (and the fact that it removes less COD, and organic pollutants) support the selection of Option 2 as the BPT technology basis.

3. Calculation of BPT Limitations for the Metal Finishing Job Shops Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. In general, EPA calculated the new BPT limitations for this subcategory using data from facilities in the Metal Finishing Job Shops subcategory employing Option 2 technology. As discussed above, EPA did not calculate new limitations for TSS or oil and grease for this subcategory. Instead, EPA set them at the same level as in the Metal Finishing effluent guidelines (40 CFR 433.13). For cyanide limitations, EPA used data from all subcategories where cyanide destruction systems were sampled. If data was not sufficient for developing BPT limitations for an individual pollutant in this subcategory, the Agency transferred data from another subcategory (see the Technical Development Document for a more detailed discussion). See the proposed rule § 438.22 following this preamble for a list of the proposed BPT limitations for the Metal Finishing Job Shops subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

C. Non-Chromium Anodizing Subcategory

1. Need for BPT Regulation

EPA describes the Non-Chromium Anodizing subcategory in Section VI.C.3 of this preamble. EPA's survey of the MP&M industry did not identify any non-chromium anodizing facilities discharging directly to surface waters. All of the non-chromium anodizing facilities in EPA's data base are either indirect or zero dischargers. EPA consequently could not evaluate any treatment systems in place at direct discharging non-chromium anodizing facilities for establishing BPT limitations. Therefore, EPA relied on technology transfer based on information and data from indirect discharging facilities in the Non-Chromium Anodizing subcategory. The Agency concluded that the technology in place at some indirect discharging non-chromium anodizers is appropriate to use as the basis for regulation of direct dischargers because the pollutant profile of the wastewater generated at non-chromium anodizers discharging directly would be similar in character to that from indirect discharging non-chromium anodizers and the model technologies in place at indirect dischargers are effective in treating the conventional pollutants that are generally not regulated in pretreatment standards.

EPA has previously promulgated BPT and BAT limitations for all of the facilities in this subcategory at 40 CFR part 433 (Metal Finishing Effluent Limitations Guidelines and Pretreatment Standards). However, EPA developed the regulations applicable to this subcategory approximately 20 years ago, and since that time, advances in anodizing processes, water conservation, pollution prevention, and wastewater treatment have occurred. EPA is proposing to set new BPT effluent limitations guidelines for this subcategory for metals, but is not revising the limitations for conventional pollutants (TSS and oil and grease). EPA based its decision not to revise the limitations for conventional pollutants on the small additional removals attainable after the incidental removal due to control of the metals.

The current regulations in 40 CFR part 433 require non-chromium anodizing facilities to meet effluent limitations for 7 metal pollutants. EPA's data show that these seven metals are present only in very small quantities in the current discharges at non-chromium anodizing facilities. Under the Metal Finishing effluent guidelines, EPA did not establish a BPT limit for aluminum,

the metal found in the largest quantity in non-chromium anodizers wastewater. The Agency has determined that direct discharging facilities in the Non-Chromium Anodizing subcategory should have a limit for aluminum and thus is proposing to replace BPT in 40 CFR part 433 with new MP&M effluent limitations that more appropriately reflect the pollutants found in non-chromium anodizing wastewater. EPA notes that the Agency expects a reduction in monitoring burden associated with this revision for direct discharging non-chromium anodizing facilities.

2. Selected BPT Option

Facilities in the Non-Chromium Anodizing subcategory generally perform unit operations such as cleaning, etching, and anodizing of aluminum, that produce metal-bearing wastewater. The majority of the metal found in anodizing wastewater is aluminum. In addition, some of these facilities also perform machining and grinding, impact deformation, and surface preparation operations that generate oily wastewater. Therefore, EPA considered technology options 1 through 4 for this subcategory because technologies included in these options treat both oily wastewater as well as metal-bearing wastewater. As explained above, EPA only discusses Options 2 and 4 in detail in this preamble since these options costed less and removed more pollutant than Options 1 and 3 (respectively).

The Agency is proposing Option 2 as the basis for BPT regulation for the Non-Chromium Anodizing subcategory. Although EPA did not identify any existing non-chromium anodizers, EPA estimated the cost of treatment and pollutant removal for a median-sized direct discharging facility with a wastewater flow of 6.25 MGY, based on the characteristics of a similarly sized indirect discharging non-chromium anodizer facility. Because direct dischargers are more likely to have treatment in place, EPA provided the model facility with treatment in place equivalent to Option 1. Therefore at the model direct discharging non-chromium anodizing facility, EPA estimates that implementation of Option 2 will cost \$0.83 per pound COD removed (1996\$), and has found that cost to be reasonable. EPA estimates that Option 2 would remove 25,700 pounds of pollutants per median-sized facility per year (including 9,200 pounds of TSS as incidental removals based on the control of metals and 1,240 pounds of aluminum).

Additionally, because solids separation by microfiltration is not used by any non-chromium anodizer facilities, the Agency concluded that Option 4 does not represent best practicable control technology for this subcategory.

3. Calculation of BPT Limitations for the Non-Chromium Anodizing Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. Because EPA's survey did not identify any direct dischargers in this subcategory, EPA used data from indirect discharging facilities to develop the BPT limitations. The Agency identified two indirect discharging facilities in this subcategory that achieved very good pollutant reductions (including, on average, 96 percent reduction of aluminum and incidental removals of 95 percent for TSS). Therefore, EPA determined that the data from these facilities were appropriate for the development of BPT limitations. If data was not sufficient for developing BPT limitations for an individual pollutant in this subcategory, the Agency transferred data from another subcategory (see the Technical Development Document for a more detailed discussion). In the case of TSS and oil and grease, EPA used the limitations in 40 CFR part 433.13. See the proposed rule § 438.32 following this preamble for a list of the proposed BPT limitations for the Non-Chromium Anodizers Subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

D. Printed Wiring Board Subcategory

1. Need for BPT Regulation

EPA describes the Printed Wiring Board subcategory in Section VI.C.4 of this preamble. The Agency estimates that there are approximately 11 direct discharging facilities in this subcategory. EPA has previously promulgated BPT and BAT limitations for all of the facilities in this subcategory at 40 CFR part 433 (Metal Finishing Effluent Limitations Guidelines and Pretreatment Standards). However, EPA developed the regulations applicable to this subcategory approximately 20 years ago, and since that time, advances in printed wiring board manufacturing processes, water conservation practices, pollution prevention techniques, and wastewater treatment have occurred. EPA is

proposing to set new BPT effluent limitations guidelines for this subcategory.

EPA estimates that direct discharging facilities in the Printed Wiring Board subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 262,000 pounds per year of oil and grease, 100,000 pounds per year of total suspended solids, 1.7 million pounds per year of COD, 242,000 pounds per year of priority and nonconventional metal pollutants, 35,000 pounds per year of priority and nonconventional organic pollutants, and 1,600 pounds per year of cyanide. As a result of the quantity of pollutant currently discharged directly to the nation's waters by printed wiring board facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the Printed Wiring Board subcategory generally perform unit operations such as cleaning, etching, masking, electroplating, electroless plating, applying, developing and stripping of photoresist, and tin/lead soldering that produce metal-bearing and organic-bearing wastewater. Therefore, EPA considered technology options 1 through 4 for this subcategory. As explained above, EPA only discusses Options 2 and 4 in detail in this preamble since these options costed less and removed more pollutant than Options 1 and 3 (respectively).

The Agency is proposing Option 2 as the basis for BPT regulation for the Printed Wiring Board subcategory. The new BPT limitations incorporate more stringent effluent requirements for priority metals, nonconventional pollutants, cyanide, and organic pollutants (by way of an indicator parameter) as compared to the limitations contained in 40 CFR part 433.13. EPA has included the conventional pollutants, TSS and oil and grease, in the new BPT regulation for this subcategory at the same level as 40 CFR part 433.13. Removals for these pollutants are incidental removals based on the increased control of metals and organic pollutants (by way of an indicator parameter) by the proposed BPT technology options. EPA's decision to propose BPT limitations based Option 2 treatment for priority metals, nonconventional pollutants, cyanide and organic pollutants reflects primarily two factors: (1) The degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be

found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Printed Wiring Board subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 2, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of COD removed. EPA estimates that implementation of Option 2 will cost \$1.92 per pound of COD removed (1996\$). The Agency has concluded that the costs of BPT Option 2 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 2 represents the average of the best performing facilities due to the prevalence of chemical precipitation followed by sedimentation in this subcategory. The Agency estimates that 100 percent of the direct discharging facilities in the Printed Wiring Board subcategory employ chemical precipitation and sedimentation treatment (Option 2); however, the Agency did identify indirect dischargers in this subcategory with Option 4 technology in place. In fact, EPA collected wastewater treatment samples at one indirect discharging printed wiring board manufacturing facility that employed Option 4 technology.

Based on the available data base, Option 4 on an annual basis only removes an additional 48,000 pounds of priority and nonconventional metals, while removing 9,000 less pounds of COD, and 250 less pounds of priority and nonconventional organic pollutants than Option 2. In addition, Option 4's annualized cost is \$2 million more than Option 2. EPA concluded that the lack of significant overall additional pollutant removals achieved by Option 4 (and the fact that it removes less COD, and organic pollutants) support the selection of Option 2 as the BPT technology basis.

3. Calculation of BPT Limitations for the Printed Wiring Board Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. In general, EPA calculated the new BPT limitations for this subcategory using data from facilities in the Printed Wiring Board subcategory employing Option 2 technology. As discussed above, EPA

did not calculate new limitations for TSS or oil and grease for this subcategory. Instead, EPA set them at the same level as in the Metal Finishing effluent guidelines (40 CFR part 433.13). For cyanide limitations, EPA used data from all subcategories where cyanide destruction systems were sampled. If data was not sufficient for developing BPT limitations for an individual pollutant in this subcategory, the Agency transferred data from another subcategory (see the Technical Development Document for a more detailed discussion). See the proposed rule § 438.42 following this preamble for a list of the proposed BPT limitations for the Printed Wiring Board subcategory. (See Section XXI.C. for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

E. Steel Forming and Finishing Subcategory

1. Need for BPT Regulation

EPA describes the Steel Forming & Finishing subcategory in Section VI.C.5 of this preamble. The Agency estimates that there are approximately 43 direct discharging facilities in this subcategory. EPA has previously promulgated BPT and BAT limitations for all of the facilities in this subcategory at 40 CFR part 420 (Iron and Steel Manufacturing Effluent Limitations Guidelines and Pretreatment Standards). However, EPA developed the regulations applicable to this subcategory approximately 20 years ago, and since that time, changes in the industry, particularly in growth of the number of facilities conducting steel forming and finishing operations without the presence of the typical steel manufacturing processes, and changes in water conservation practices, pollution prevention techniques, and wastewater treatment have occurred. In addition, the operations covered by this proposed rule are segments of the forming and finishing subcategories in 40 CFR part 420. The proposed MP&M subcategory is comprised of limitations and standards based on specific forming and finishing operations only.

EPA estimates that direct discharging facilities in the new Steel Forming & Finishing subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 195,000 pounds per year of oil and grease, 1.08 million pounds per year of total suspended solids, 6 million pounds per year of COD, 771,000 pounds per year

of priority and nonconventional metal pollutants, 168,000 pounds per year of priority and nonconventional organic pollutants, and 2,300 pounds per year of cyanide. As a result of the quantity of pollutant currently discharged directly to the nation's waters by steel forming & finishing facilities, EPA determined that there was a need for BPT regulation for this subcategory. In a separate notice, EPA is proposing to revise other subcategories in the Iron and Steel Manufacturing effluent guidelines.

2. Selected BPT Option

Facilities in the proposed MP&M Steel Forming & Finishing subcategory generally perform unit operations such as acid pickling, annealing, conversion coating (e.g., zinc phosphate, copper sulfate), hot dip coating, electroplating, heat treatment, welding, and drawing of steel bar, rod, and wire that produce metal-bearing and oil-bearing wastewater. Therefore, EPA considered technology options 1 through 4 for this subcategory. As explained above, EPA only discusses Options 2 and 4 in detail in this preamble since these options costed less and removed more pollutant than Options 1 and 3 (respectively).

The Agency is proposing Option 2 as the basis for the new BPT regulation for the Steel Forming & Finishing subcategory. EPA's decision to propose BPT limitations based on Option 2 treatment reflects primarily two factors: (1) the degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Steel Forming and Finishing subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 2, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of COD removed. EPA estimates that implementation of Option 2 will cost \$6.51 per pound of COD removed (\$1996). The Agency has concluded that the costs of BPT Option 2 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 2 represents the average of the best performing facilities due to the prevalence of chemical precipitation

followed by sedimentation in this subcategory. The Agency estimates that 64 percent of the direct discharging facilities in this subcategory employ chemical precipitation followed by sedimentation (Option 2). Because no facilities in this subcategory employ microfiltration after chemical precipitation for solids separation, the Agency concluded that Option 4 does not represent best practicable control technology.

3. Calculation of BPT Limitations for the Steel Forming & Finishing Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. In general, EPA calculated BPT limitations for this subcategory using data transferred from facilities employing Option 2 technology in the General Metals subcategory. However, EPA determined that mass-based limitations (rather than concentration-based limitations developed for the General Metals subcategory) are more appropriate for this subcategory. Facilities in this subcategory keep close track of their production on a mass basis primarily because of their prior regulation under the mass-based Iron & Steel Manufacturing effluent guidelines. Furthermore, EPA determined that mass-based limitations are appropriate for this subcategory due to the uniform nature of the products produced (wire, rod, bar, pipe, and tube). The uniform nature of the products produced by this industry makes for an easier conversion from concentration-based to mass-based limitations. One of the primary reasons that EPA is not requiring mass-based limitations for other subcategories is the fact that most MP&M facilities do not collect production information on a wastestream-by-wastestream basis, and therefore development of mass-based limitations could create a significant burden for both the POTW and the MP&M facility. In the case of the Steel Forming and Finishing subcategory, EPA is able to use the industry's production information to propose production-based limitations for the steel forming and finishing subcategory.

EPA solicits paired treatment system influent and effluent data from Steel Forming & Finishing facilities, so that limits may better reflect treatment at steel forming and finishing facilities. EPA also solicits comment on whether to allow concentration-based limits for this subcategory and any rationale for doing so. For cyanide limitations, EPA used data from all subcategories where cyanide destruction systems were sampled (see the Technical

Development Document for a more detailed discussion). See the proposed rule § 438.52 following this preamble for a list of the proposed BPT limitations for the Steel Forming & Finishing subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

F. Oily Wastes Subcategory

1. Need for BPT Regulation

EPA describes the Oily Wastes subcategory in Section VI.C.6 of this preamble. EPA estimates that approximately 900 MP&M direct discharging facilities in the Oily Wastes subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 965,000 pounds per year of oil and grease, 414,000 pounds per year of total suspended solids, 6.4 million pounds per year of COD, 595,000 pounds per year of priority and nonconventional metal pollutants, and 135,000 pounds per year of priority and nonconventional organic pollutants. As a result of the quantity of pollutant currently discharged directly to the nation's waters by Oily Waste facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the Oily Wastes subcategory generally perform unit operations such as alkaline cleaning and its associated rinses to remove oil and dirt from components, machining and grinding producing wastewater containing coolants and lubricants, and dye penetrant and magnetic flux testing that produce mainly oil-bearing wastewater (see Section VI.C.6 for a list of the unit operations that define the applicability of this subcategory). Because of the oily nature of the wastewater, EPA considered technology options 5 through 8 for this subcategory. (EPA did not consider oily wastewater treatment using DAF (Options 9 and 10) because it was not widely used by facilities in this subcategory. The Agency analyzed the DAF options for the Railroad Line Maintenance and Shipbuilding Dry Dock subcategories only.) As explained above, EPA only discusses Options 6 and 8 in detail in this preamble since these options costed less and removed more pollutant than Options 5 and 7 (respectively).

The Agency is proposing Option 6, oil-water separation by chemical emulsion breaking, gravity separation, and oil skimming, as the basis for the

new BPT regulation for the Oily Wastes subcategory. EPA's decision to propose BPT limitations based on Option 6 treatment reflects primarily two factors: (1) the degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Oily Wastes subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 6, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of COD removed. EPA estimates that implementation of Option 6 will cost \$2.18 per pound of COD removed (1996\$). The Agency has concluded that the costs of BPT Option 6 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 6 represents the average of the best performing facilities due to the prevalence of chemical emulsion breaking and oil-skimming in this subcategory. The Agency estimates that 11 percent of the direct discharging facilities in the Oily Wastes subcategory perform oil-water separation through chemical emulsion breaking (Option 6) while only 4 percent employ ultrafiltration (Option 8).

Based on the available data base, Option 8 on an annual basis only removes an additional 19,000 pounds of TSS, 56,600 pounds of O&G, while removing 1.42 million less pounds of COD, 12,000 less pounds of priority and nonconventional metals, and 2,400 less pounds of priority and nonconventional organic pollutants than Option 6. In addition, Option 8's annualized cost is \$43 million more than Option 6. EPA concluded that the lack of significant overall additional pollutant removals achieved by Option 8 do not justify its use as a basis for BPT for this subcategory.

3. Calculation of BPT Limitations for the Oily Wastes subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. EPA calculated BPT limitations for this subcategory using data from facilities in the Oily Wastes

subcategory employing Option 6 technology. See the proposed rule § 438.62 following this preamble for a list of the proposed BPT limitations for the Oily Wastes subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

G. Railroad Line Maintenance Subcategory

1. Need for BPT Regulation

EPA describes the Railroad Line Maintenance subcategory in Section VI.C.7 of this preamble. The Agency estimates that there are approximately 34 direct discharging facilities in this subcategory. EPA determined that BPT limitations for this subcategory were necessary because of the oil and grease and potential TSS loads that facilities in this subcategory generate. EPA estimates that direct discharging facilities in the Railroad Line Maintenance subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 52,000 pounds per year of oil and grease, 170,000 pounds per year of COD, 18,000 pounds per year of total suspended solids, 54,000 pounds per year of priority and nonconventional metal pollutants, and 1,600 pounds per year of priority and nonconventional organic pollutants. As a result of the quantity of pollutant currently discharged directly to the nation's waters by Railroad Line Maintenance facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the Railroad Line Maintenance subcategory generally perform unit operations that produce mainly oil-bearing wastewater such as alkaline cleaning and its associated rinses to remove oil and dirt from components, and machining and grinding which use coolants and lubricants. Because of the oily nature of the wastewater, EPA considered technology options 7 through 10 for this subcategory. (EPA did not consider oily wastewater treatment using oil-water separation through emulsion breaking (Options 5 and 6) for this subcategory because a large number of railroad line maintenance facilities currently use DAF (Options 9 and 10)). As explained above, EPA only discusses Options 8 and 10 in detail in this preamble since these options costed less and removed

more pollutant than Options 7 and 9 (respectively).

The Agency is proposing Option 10, oil-water separation by DAF, as the basis for the new BPT regulation for the Railroad Line Maintenance subcategory. EPA's decision to propose BPT limitations based on Option 10 treatment reflects primarily two factors: (1) the degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Railroad Line Maintenance subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 10, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of O&G removed. EPA estimates that implementation of Option 10 will cost \$20.00 per pound of COD removed (1996\$). The Agency has concluded that the costs of BPT Option 10 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 10 represents the average of the best performing facilities due to the prevalence of DAF in this subcategory. The Agency estimates that 91 percent of the direct discharging facilities in the Railroad Line Maintenance subcategory employ DAF (Option 10) while no facilities employ ultrafiltration (Option 8). Because no facilities in this subcategory employ ultrafiltration for removal of O&G, the Agency concluded that Option 8 does not represent best practicable control technology.

3. Calculation of BPT Limitations for the Railroad Line Maintenance Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. EPA calculated BPT limitations for this subcategory using data from facilities in the Railroad Line Maintenance subcategory employing Option 10 technology. In cases where data from the Railroad Line Maintenance subcategory was not sufficient for a particular pollutant, the Agency transferred effluent data from facilities in the Shipbuilding Dry Dock subcategory in order to develop a

proposed BPT limitation (see the Technical Development Document for a more detailed discussion). See the proposed rule § 438.72 following this preamble for a list of the proposed BPT limitations for the Railroad Line Maintenance subcategory. (See Section XXI.C for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

H. Shipbuilding Dry Dock Subcategory

1. Need for BPT Regulation

EPA describes the Shipbuilding Dry Dock subcategory in Section VI.C.8 of this preamble. The Agency estimates that there are six direct discharging facilities in this subcategory. The Agency notes that many shipbuilders operate multiple dry docks (or similar structures) and that this is the number of estimated facilities (not dry docks) that discharge MP&M process wastewater from dry docks (and similar structures). EPA determined that BPT limitations for this subcategory were necessary because of the oil and grease and potential TSS loads that facilities in this subcategory generate. EPA estimates that direct discharging facilities in the Shipbuilding Dry Dock subcategory currently discharge substantial quantities of pollutants into the surface waters of the United States, including 8.5 million pounds per year of oil and grease, 18,400 pounds per year of total suspended solids, 976,000 pounds per year of COD, 88,500 pounds per year of priority and nonconventional metal pollutants, and 6,000 pounds per year of priority and nonconventional organic pollutants. As a result of the quantity of pollutant currently discharged directly to the nation's waters by Shipbuilding Dry Dock facilities, EPA determined that there was a need for BPT regulation for this subcategory.

2. Selected BPT Option

Facilities in the Shipbuilding Dry Dock subcategory generally perform unit operations that produce mainly oil-bearing wastewater such as abrasive blasting, hydroblasting, painting, welding, corrosion preventive coating, floor cleaning, aqueous degreasing, and testing (e.g., hydrostatic testing). Because of the oily nature of the wastewater, EPA considered technology options 7 through 10 for this subcategory. (EPA did not consider oily wastewater treatment using oil-water separation through chemical emulsion breaking (Options 5 and 6) for this subcategory because all of the

shipbuilding dry dock facilities in EPA's database currently use DAF (Options 9 and 10)). As explained above, EPA only discusses Options 8 and 10 in detail in this preamble since these options costed less and removed more pollutant than Options 7 and 9 (respectively).

The Agency is proposing Option 10, oil-water separation by DAF, as the basis for the new BPT regulation for the Shipbuilding Dry Dock subcategory. EPA's decision to propose BPT limitations based Option 10 treatment reflects primarily two factors: (1) The degree of effluent reductions attainable and (2) the total cost of the proposed treatment technologies in relation to the effluent reductions achieved. No basis could be found for identifying different BPT limitations based on age, size, process or other engineering factors. Neither the age nor the size of a facility in the Shipbuilding Dry Dock subcategory will directly affect the treatability of MP&M process wastewater. For facilities in this subcategory, the most pertinent factors for establishing the limitations are costs of treatment and the level of effluent reductions obtainable.

In Table IX-1 above, EPA presents the annual pollutant removals for direct dischargers for Option 10, and in Table IX-2 above, it presents the cost per pound removed using only the pounds of O&G removed. EPA estimates that implementation of Option 10 will cost \$0.25 per pound of O&G removed (1996\$). The Agency has concluded that the costs of BPT Option 10 are achievable and are reasonable as compared to the removals achieved by this option.

The technology proposed in Option 10 represents the average of the best performing facilities due to the prevalence of DAF in this subcategory. According to EPA's database, 100 percent of the direct discharging facilities in the Shipbuilding Dry Dock subcategory employ DAF (Option 10) while no facilities employ ultrafiltration (Option 8). Because no facilities in this subcategory employ ultrafiltration for removal of O&G, the Agency concluded that Option 8 does not represent best practicable control technology.

3. Calculation of BPT Limitations for the Shipbuilding Dry Dock Subcategory

EPA explained its data editing procedures and statistical methodology for calculating BPT limitations in Section VIII.B. EPA calculated BPT limitations for this subcategory using data from facilities in the Shipbuilding Dry Dock subcategory employing Option 10 technology. See the proposed rule § 438.82 following this preamble for a

list of the proposed BPT limitations for the Shipbuilding Dry Dock subcategory. (See Section XXI.C. for a discussion of monitoring flexibility.) The Statistical Development Document contains detailed information on which facilities EPA used in calculating the proposed BPT limitations.

X. Best Conventional Pollutant Control Technology (BCT)

A. July 9, 1986 BCT Methodology

The BCT methodology, promulgated in 1986 (51 FR 24974), discusses the Agency's consideration of costs in establishing BCT effluent limitations guidelines. EPA evaluates the reasonableness of BCT candidate technologies (those that are technologically feasible) by applying a two-part cost test:

- (1) The POTW test; and
- (2) The industry cost-effectiveness test.

In the POTW test, EPA calculates the cost per pound of conventional pollutant removed by industrial dischargers in upgrading from BPT to a BCT candidate technology and then compares this cost to the cost per pound of conventional pollutant removed in upgrading POTWs from secondary treatment. The upgrade cost to industry must be less than the POTW benchmark of \$0.25 per pound (in 1976 dollars).

In the industry cost-effectiveness test, the ratio of the incremental BPT to BCT cost divided by the BPT cost for the industry must be less than 1.29 (*i.e.*, the cost increase must be less than 29 percent).

B. Discussion of BCT Option for Metal-Bearing Wastewater

For today's proposed rule, EPA considered whether or not to establish BCT effluent limitation guidelines for MP&M sites that would attain incremental levels of effluent reduction beyond BPT for TSS. The only technology option identified to attain further TSS reduction is the addition of multimedia filtration to existing BPT systems. For the BCT option, EPA considered the addition of multimedia filtration to the BPT technology option for the General Metals, Metal Finishing Job Shops, Non-Chromium Anodizing, Printed Wiring Board, and Steel Forming and Finishing subcategories (*i.e.*, the metal-bearing subcategories).

EPA applied the BCT cost test to use of multimedia filtration technology as a means to reduce TSS loadings. EPA split the MP&M sites into three flow categories: less than 10,000 gallons per year (gpy); 10,000 gpy to 1,000,000 gpy; and greater than 1,000,000 gpy. For each

of these three flow categories, EPA chose a representative site for which EPA had estimated the costs of installing the Option 2 technologies discussed under BPT (See Section IX above). The Agency evaluated the costs of installing a polishing multimedia filter to remove an estimated additional 35 percent of the TSS discharged after chemical precipitation and clarification treatment. This estimated removal reflects the reduced TSS concentrations seen when filters are used after chemical precipitation and sedimentation in the MP&M industry. The cost per pound removed for facilities discharging greater than 1 MGY was \$13/lb of TSS (in 1976 dollars), the cost per pound removed for facilities discharging between 10,000 and 1,000,000 gpy was \$518/lb and the cost per pound removed for facilities discharging less than 10,000 gpy was \$1,926/lb of TSS (in 1976 dollars). All of these cases individually as well as combined exceed the \$0.25/lb (in 1976 dollars) POTW cost test value. Because these costs exceed the POTW benchmark, the first part of the cost test fails; therefore, the second part of the test was unnecessary. Therefore, EPA determined that multimedia filtration does not pass the cost test for BCT regulations development. In light of the above, EPA is proposing to set BCT limitations for the General Metals, Metal Finishing Job Shops, Non-Chromium Anodizing, Printed Wiring Board, and Steel Forming and Finishing subcategories equivalent to BPT limitations for their respective subcategories.

C. Discussion of BCT Option for Oily Wastewater

For today's proposed rule, EPA considered whether or not to establish BCT effluent limitation guidelines for MP&M facilities that would attain incremental levels of effluent reduction beyond BPT for O&G. EPA considered the addition of an ultrafilter to existing BPT systems (oil-water separation by chemical emulsion breaking, gravity separation, and oil skimming) as a viable technology option to attain further O&G reduction. EPA considered this BCT option for the Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Dock subcategories.

EPA applied the BCT cost test to use of ultrafiltration technology as a means to reduce O&G loadings. EPA split the MP&M sites into three flow categories: less than 10,000 gallons per year (gpy); 10,000 gpy to 1,000,000 gpy; and greater than 1,000,000 gpy. For each of these three flow categories, EPA chose a representative site for which EPA had

estimated the costs of installing the Option 2 technologies discussed under BPT (See Section IX above). The Agency evaluated the costs of installing an ultrafilter to remove an estimated additional 36 percent of the O&G discharged after oil-water separation by chemical emulsion breaking, gravity separation, and oil skimming. This estimated removal reflects the reduced O&G concentrations seen when ultrafilters are used after chemical emulsion breaking with oil skimming in the MP&M industry. The cost per pound removed for facilities discharging greater than 1 MGY was \$238/lb of O&G (in 1976 dollars), the cost per pound removed for facilities discharging between 10,000 and 1,000,000 gpy was \$2,213/lb, and the cost per pound removed for facilities discharging less than 10,000 gpy was \$5,031/lb of O&G (in 1976 dollars). All of these cases individually as well as combined exceed the \$0.25/lb (in 1976 dollars) POTW cost test value. Because these costs exceed the POTW benchmark, the first part of the cost test fails; therefore, the second part of the test was unnecessary. Therefore, EPA determined that ultrafiltration does not pass the cost test for BCT regulations development. In light of the above, EPA is proposing to set BCT limitations for the Oily Wastes, Railroad Line Maintenance and Shipbuilding Dry Dock subcategories equivalent to BPT limitations for their respective subcategories.

XI. Best Available Technology Economically Achievable (BAT)

EPA considers the following factors in establishing the best available technology economically achievable (BAT) level of control: the age of process equipment and facilities, the processes employed, process changes, the engineering aspects of applying various types of control techniques, the costs of applying the control technology, economic impacts imposed by the regulation, non-water quality environmental impacts such as energy requirements, air pollution and solid waste generation, and other such factors as the Administrator deems appropriate (section 304(b)(2)(B) of the Act). In general, the BAT technology level represents the best existing economically achievable performance among plants with shared characteristics. In making the determination about economic achievability, the Agency takes into consideration factors such as plant closures and product line closures. Where existing wastewater treatment performance is uniformly inadequate,

BAT technology may be transferred from a different subcategory or industrial category. BAT may also include process changes or internal plant controls which are not common industry practice.

EPA considered the same 10 technology options for BAT as it discussed under BPT. EPA did not include the application of filters, discussed under BPT, as a BAT option. Data collected during sampling at MP&M facilities demonstrated very little, if any, additional removal of many metal pollutants resulting from the use of filters as compared to concentrations of the same metals after the chemical precipitation and clarification treatment followed by gravity settling. Thus, although filtration is demonstrated to be effective in achieving additional removals of suspended solids, and as such EPA considered it for the basis of BPT, multimedia or sand filtration does not reflect the best available technology performance for priority and nonconventional pollutants.

For all of the MP&M subcategories (except Railroad Line Maintenance and Shipbuilding Dry Dock subcategories), EPA is proposing BAT limitations equivalent to BPT. For the Railroad Line Maintenance and Shipbuilding Dry Dock subcategories, EPA is not proposing BAT limitations. EPA briefly discusses the BAT selection for each of the subcategories below and refers to Section IX for a detailed discussion of the need for BPT regulation, the selected BPT technology option, the calculation of BPT limitations, and the estimated removals and costs of BPT for each subcategory.

A. General Metals Subcategory

EPA has not identified any more stringent economically-achievable treatment technology option which it considered to represent BAT level of control applicable to General Metals subcategory facilities. Therefore, the Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the General Metals subcategory. EPA estimates that 20 facilities (less than 1 percent of the direct dischargers in this subcategory) will close as a result of BAT based on Option 2. EPA found this option to be economically achievable for the subcategory as a whole. Additionally, the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate BPT Option 4 as a basis for establishing BAT more

stringent than the BPT level of control being proposed today. EPA estimates that the economic impact due to the additional controls at Option 4 levels would result in 35 facility closures (<1 percent of the direct dischargers in this subcategory). See Section XVI.E for a discussion on job losses. While EPA does not have a bright line for determining what level of impact is economically achievable for the industry as a whole, EPA looked for a breakpoint that would mitigate adverse economic impacts without greatly affecting the toxic pound equivalents being removed under the proposed rule. By selecting Option 2 as BAT, EPA was able to reduce facility closures by 43 percent, while only losing about 1.5 percent of the toxic pound equivalents that would be removed under Option 4. Option 4 resulted in some level of improved pollutant reductions; however, the amounts are not very large and the cost of implementing the level of control associated with Option 4 is disproportionately high. Thus, EPA rejected Option 4 as a basis for BAT for this subcategory.

B. Metal Finishing Job Shops Subcategory

The Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the Metal Finishing Job Shop subcategory. EPA estimates that no facilities will close as a result of BAT based on Option 2. Therefore, the Agency found this Option to be economically achievable. Additionally, the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate transferring technology reflected in BPT Option 4 as a basis for establishing BAT more stringent than the BPT level of control being proposed today. As was the case for BAT based on Option 2, EPA estimates that no facilities would close as a result of BAT based on Option 4. Therefore, EPA does consider Option 4 to be economically achievable for this subcategory. However, EPA is not proposing to establish BAT limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. By selecting Option 2 as the basis for BAT, EPA reduced annualized compliance costs by \$1.1 million (1996\$) while only losing 2 percent of the toxic pound equivalents that would be removed under Option 4. The Agency concluded that the additional costs of Option 4 do

not justify the lack of significant additional pollutant removals achieved for direct dischargers in this subcategory. Therefore, EPA determined that Option 2 is the "best available" technology economically achievable for the Metal Finishing Job Shop subcategory.

C. Non-Chromium Anodizing Subcategory

The Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the Non-Chromium Anodizing subcategory. As mentioned in the BPT discussion, EPA's survey of the MP&M industry did not identify any non-chromium anodizing facilities discharging directly to surface waters. All of the non-chromium anodizing facilities in EPA's data base are either indirect or zero dischargers. EPA consequently could not evaluate any treatment systems in place at direct discharging non-chromium anodizing facilities for establishing BAT limitations. Therefore, EPA relied on information and data from indirect discharging facilities in the Non-Chromium Anodizing subcategory. Based on this analysis the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate transferring technology reflected in BPT Option 4 as a basis for establishing BAT more stringent than the BPT level of control being proposed today. However, EPA is not proposing to establish BAT limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. EPA used a facility with a flow of 6.25 MGY (the median discharge flow for indirect discharging facilities in this subcategory) to model the costs and pollutant loads reduced for a direct discharging facility. Because direct dischargers are more likely to have treatment in place, EPA provided the model facility with treatment in place equivalent to Option 1. Based on this model facility, EPA estimated that annualized compliance costs per facility for Option 2 will be \$41,000 (1996\$) less than Option 4, and Option 2 will remove only 83 pound-equivalents less than Option 4. The Agency concluded that the additional costs of Option 4 do not justify the additional pollutant removals achieved for direct dischargers in this subcategory. Therefore, EPA determined that Option 2 is the "best available" technology economically

achievable for the Non-Chromium Anodizing subcategory.

D. Printed Wiring Board Subcategory

The Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the Printed Wiring Board subcategory. EPA estimates that no facilities will close as a result of BAT based on Option 2. Therefore, the Agency found this option to be economically achievable. Additionally, the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate BPT Option 4 as a basis for establishing BAT more stringent than the BPT level of control being proposed today. As was the case for BAT based on Option 2, EPA estimates that no facilities would close as a result of BAT based on Option 4. Therefore, EPA does consider Option 4 to be economically achievable for this subcategory. However, EPA is not proposing to establish BAT limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. By selecting Option 2 as the basis for BAT, EPA reduced annualized compliance costs by \$2 million (1996\$) while only losing 3 percent of the toxic pound equivalents that would be removed under Option 4. The Agency concluded that the additional costs of Option 4 do not justify the lack of significant additional pollutant removals achieved for direct dischargers in this subcategory. Therefore, EPA determined that Option 2 is the "best available" technology economically achievable for the Printed Wiring Board subcategory.

E. Steel Forming & Finishing Subcategory

The Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the Steel Forming & Finishing subcategory. EPA estimates that no facilities will close as a result of BAT based on Option 2. Therefore, the Agency found this Option to be economically achievable.

Additionally, the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate transferring technology reflected in BPT Option 4 as a basis for establishing BAT more stringent than the BPT level of control being proposed today. EPA is not

proposing to establish BAT limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. By selecting Option 2 as the basis for BAT, EPA reduced annualized compliance costs by \$2.6 million (1996\$) while only losing 3 percent of the toxic pound equivalents that would be removed under Option 4. The Agency concluded that the additional costs of Option 4 do not justify the insignificant additional pollutant removals achieved for direct dischargers in this subcategory.

F. Oily Wastes Subcategory

EPA has not identified any more stringent economically-achievable treatment technology option which it considered to represent BAT level of control applicable to Oily Wastes subcategory facilities. Therefore, the Agency is proposing to establish BAT equivalent to BPT for toxic and nonconventional pollutants for the Oily Wastes subcategory. EPA estimates that no facilities will close as a result of BAT based on Option 6. Additionally, the Agency believes that Option 6 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level.

EPA did evaluate BPT Option 8 (ultrafiltration) as a basis for establishing BAT more stringent than the BPT level of control being proposed today. As was the case for BAT based on Option 6, EPA estimates that no facilities would close as a result of BAT based on Option 8. Therefore, EPA does consider Option 8 to be economically achievable for this subcategory. However, based on the available data base, EPA is not proposing to establish BAT limitations based on Option 8 because it removes fewer pound-equivalents than Option 6. Therefore, the Agency determined that Option 6 is the "best available" technology economically achievable for the removal of priority pollutants from wastewater generated at Oily Wastes subcategory facilities.

G. Railroad Line Maintenance Subcategory

EPA is not proposing to establish BAT regulations for the Railroad Line Maintenance subcategory. The Agency concluded that the facilities in this subcategory discharge very few pounds of toxic pollutants. EPA estimates that 34 railroad line maintenance facilities discharge 1,100 pound equivalents per year to surface waters, or about 32 pound equivalents per year per facility.

The Agency based the loadings calculations on EPA sampling data, which found very few priority toxic pollutants at treatable levels in raw wastewater. Therefore, nationally-applicable regulations are unnecessary at this time and direct dischargers will remain subject to permit limitations for toxic and nonconventional pollutants established on a case-by-case basis using best professional judgement.

H. Shipbuilding Dry Dock Subcategory

EPA is not proposing to establish BAT regulations for the Shipbuilding Dry Dock subcategory because of the small number of facilities in this subcategory. EPA estimates that there are 6 shipbuilding facilities operating one or more dry docks in the U.S. that discharge directly to surface waters. EPA determined that nationally-applicable regulations are unnecessary at this time because of the small number of facilities in this subcategory. The Agency believes that limitations established on a case-by-case basis using best professional judgement can more appropriately address individual toxic and nonconventional pollutants that may be present at these six facilities.

XII. Pretreatment Standards for Existing Sources (PSES)

A. Need for Pretreatment Standards

Indirect dischargers in the MP&M industrial category, like the direct dischargers, use raw materials that contain many priority pollutant and nonconventional metal pollutants. These indirect facilities may discharge many of these pollutants to POTWs at significant mass or concentration levels, or both. EPA estimates that indirect discharging facilities annually discharge approximately 125 million pounds of priority and nonconventional metals, and 47 million pounds of priority and nonconventional organic pollutants.

Unlike direct dischargers whose wastewater will receive no further treatment once it leaves the facility, indirect dischargers send their wastewater to POTWs for further treatment, which occurs unless there is a bypass, upset, or sewer overflow. EPA establishes pretreatment standards for those BAT pollutants that pass through POTWs. Therefore, for indirect dischargers, before proposing pretreatment standards, EPA examines whether the pollutants discharged by the industry "pass through" POTWs to waters of the U.S. or interfere with POTW operations or sludge disposal practices on a national basis. Generally, to determine if pollutants pass through POTWs, EPA compares the percentage

of the pollutant removed by well-operated POTWs achieving secondary treatment with the percentage of the pollutant removed by facilities meeting BAT effluent limitations. In this manner, EPA can ensure that the combined treatment at indirect discharging facilities and POTWs is at least equivalent to that obtained through treatment by direct dischargers.

This approach to the definition of pass-through satisfies two competing objectives set by Congress: (1) That standards for indirect dischargers be equivalent to standards for direct dischargers, and (2) that the treatment capability and performance of POTWs be recognized and taken into account in regulating the discharge of pollutants from indirect dischargers. Rather than compare the mass or concentration of pollutants discharged by POTWs with the mass or concentration of pollutants discharged by BAT facilities, EPA compares the percentage of the pollutants removed by BAT facilities to the POTW removals. EPA takes this approach because a comparison of the mass or concentration of pollutants in POTW effluents with pollutants in BAT facility effluents would not take into account the mass of pollutants discharged to the POTW from other industrial and non-industrial sources, nor the dilution of the pollutants in the POTW to lower concentrations from the addition of large amounts of other industrial and non-industrial water.

The primary source of the POTW percent removal data is the "Fate of Priority Pollutants in Publicly Owned Treatment Works" (EPA 440/1-82/303, September 1982), commonly referred to as the "50-POTW Study." This study presents data on the performance of 50 well-operated POTWs that employ secondary biological treatment in removing pollutants. Each sample was analyzed for three conventional, 16 non-conventional, and 126 priority toxic pollutants.

At the time of the 50-POTW sampling program, which spanned approximately 2½ years (July 1978 to November 1980), EPA collected samples at selected POTWs across the U.S. The samples were subsequently analyzed by either EPA or EPA-contract laboratories using test procedures (analytical methods) specified by the Agency or in use at the laboratories. Laboratories typically reported the analytical method used along with the test results. However, for those cases in which the laboratory specified no analytical method, EPA was able to identify the method based on the nature of the results and knowledge of the methods available at the time.

Each laboratory reported results for the pollutants for which it tested. If the laboratory found a pollutant to be present, the laboratory reported a result. If the laboratory found the pollutant not to be present, the laboratory reported either that the pollutant was "not detected" or a value with a "less than" sign (<) indicating that the pollutant was below that value. The value reported along with the "less than" sign was the lowest level to which the laboratory believed it could reliably measure. EPA subsequently established these lower levels as the minimum levels of quantitation (MLs). In some instances, different laboratories reported different (sample-specific) MLs for the same pollutant using the same analytical method.

Because of the variety of reporting protocols among the 50-POTW Study laboratories (pages 27 to 30, 50-POTW Study), EPA reviewed the percent removal calculations used in the pass-through analysis for previous industry studies, including those performed when developing effluent guidelines for Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) Manufacturing, Centralized Waste Treatment (CWT), and Commercial Hazardous Waste Combustors. EPA found that, for 12 parameters, different analytical minimum levels were reported for different rulemaking studies (10 of the 21 metals, cyanide, and one of the 41 organics).

To provide consistency for data analysis and establishment of removal efficiencies, EPA reviewed the 50-POTW Study, standardized the reported MLs for use in the final rules for CWT and Transportation Equipment Cleaning Industries and for this proposed rule and the Iron and Steel proposed rule. A more detailed discussion of the methodology used and the results of the ML evaluation are contained in the record for today's proposal.

In using the 50-POTW Study data to estimate percent removals, EPA has established data editing criteria for determining pollutant percent removals. Some of the editing criteria are based on differences between POTW and industry BAT treatment system influent concentrations. For many toxic pollutants, POTW influent concentrations were much lower than those of BAT treatment systems. For many pollutants, particularly organic pollutants, the effluent concentrations from both POTW and BAT treatment systems were below the level that could be found or measured. As noted in the 50-POTW Study, analytical laboratories reported pollutant concentrations below the analytical threshold level,

qualitatively, as "not detected" or "trace," and reported a measured value above this level. Subsequent rulemaking studies such as the 1987 OCPSF study used the analytical method nominal "minimum level" (ML) established in 40 CFR part 136 for laboratory data reported below the analytical threshold level. Use of the nominal minimum level (ML) may overestimate the effluent concentration and underestimate the percent removal. Because the data collected for evaluating POTW percent removals included both effluent and influent levels that were close to the analytical detection levels, EPA devised hierarchical data editing criteria to exclude data with low influent concentration levels, thereby minimizing the possibility that low POTW removals might simply reflect low influent concentrations instead of being a true measure of treatment effectiveness.

EPA has generally used hierarchic data editing criteria for the pollutants in the 50-POTW Study. For today's proposal, as in previous rulemakings, EPA used the following editing criteria:

- Substitute the standardized pollutant-specific analytical minimum level for values reported as "not detected," "trace," "less than [followed by a number]," or a "number" less than the standardized analytical minimum level,
- Retain pollutant influent and corresponding effluent values if the average pollutant influent level is greater than or equal to 10 times the pollutant minimum level (10×ML), and
- If none of the average pollutant influent concentrations are at least 10 times the minimum level, then retain average influent values greater than or equal to two times the minimum level (2×ML) along with the corresponding average effluent values. (In most cases, 2×ML will be equal to or less than 20 µg/l.)

EPA then calculates each POTW percent removal for each pollutant based on its average influent and its average effluent values. The national POTW percent removal used for each pollutant in the pass-through test is the median value of all the POTW pollutant specific percent removals.

The rationale for retaining POTW data using the "10×ML" editing criterion is based on the BAT organic pollutant treatment performance editing criteria initially developed for the 1987 OCPSF regulation (52 FR 42522, 42545-48; November 5, 1987). BAT treatment system designs in the OCPSF industry typically achieved at least 90 percent removal of toxic pollutants. Since most

of the OCPSF effluent data from BAT biological treatment systems had values of "not detected," the average influent concentration for a compound had to be at least 10 times the analytical minimum level for the difference to be meaningful (demonstration of at least 90 percent removal) and qualify effluent concentrations for calculation of effluent limits.

Additionally, due to the large number of pollutants of concern for the MP&M industry, EPA also used data from the National Risk Management Research Laboratory (NRMRL) Treatability Database (formerly called the Risk Reduction Engineering Laboratory (RREL) database) to augment the POTW database for the pollutants which the 50-POTW Study did not cover. EPA notes that the 50 POTW Study contains percent removal data for all of the pollutants for which EPA is proposing effluent limitations and pretreatment standards. The RREL database was used to estimate incidental pollutant reductions achieved by the technology for some pollutants that are not being expressly limited. This database provides information, by pollutant, on removals obtained by various treatment technologies. The database provides the user with the specific data source and the industry from which the wastewater was generated. For each pollutant of concern EPA considered for this proposed rule that was not found in the 50-POTW database, EPA used data from the NRMRL database, using only treatment technologies representative of typical POTW secondary treatment operations (activated sludge, activated sludge with filtration, aerated lagoons). EPA further edited these files to include information pertaining only to domestic or industrial wastewater. EPA used pilot-scale and full-scale data only, and eliminated bench-scale data and data from less reliable references. These and other aspects of the methodology used for this proposal are described in Section 7 of the Technical Development Document.

The results of the POTW pass-through analysis for indirect dischargers are

discussed in Sections XII.D to XII.K for each subcategory. In addition, Section XIV of today's proposal discusses several issues related to the editing criteria applied to the 50-POTW data base. EPA solicits comments on its pass-through methodology, including the revised editing criteria discussed above as well as the additional issues described in Section XIV and in the record for today's proposal.

B. Overview of Technology Options for PSES

Indirect discharging MP&M facilities generate wastewater with similar pollutant characteristics to direct discharging facilities. Hence, in evaluating technology options for PSES, EPA considered the same ten treatment technologies discussed previously for BPT and BAT. However, as described below, along with the technology options, EPA also evaluated "low flow" exclusions for indirect discharging facilities (see Sections II.D and VI for additional discussion on the low flow exclusions).

C. Overview of Low Flow Exclusions

For each subcategory, EPA evaluated various low flow exclusions (also referred to as "flow cutoffs") for indirect dischargers. The Agency considered several factors in determining what flow level, if any, is appropriate for excluding facilities from compliance with pretreatment standards. For several of the subcategories, EPA considered the local control authorities' increased burden associated with the development of new permits or other control mechanisms for MP&M facilities. For some subcategories, the Agency considered flow exclusions as a way to reduce economic impacts. EPA also considered the amount of pollutant (in pound-equivalents) discharged per year by the subcategory and by each of the facilities on an average annual basis, in conjunction with the costs of regulation, to identify an appropriate level for an exclusion. In cases where EPA is proposing an option that also specifies a flow cutoff, it means that facilities

with annual wastewater flow below the cutoff would not be subject to the MP&M categorical pretreatment standards. These facilities would remain subject to the general pretreatment regulation at 40 CFR part 403 or their existing categorical pretreatment standards (e.g., 40 CFR part 413 or part 433). For the Metal Finishing Job Shops subcategory, although the proposed option does not contain a flow cutoff, several other options with various flow cutoffs are discussed in today's proposal. Some of these options would require excluded facilities to remain covered by categorical pretreatment standards under 40 CFR part 413 (Electroplating) and 40 CFR part 433 (Metal Finishing). In addition, some indirect discharging facilities in the General Metals subcategory that discharge less than 1 MGY will remain covered by the pretreatment standards in 40 CFR part 433. EPA is not proposing pretreatment standards for the Non-Chromium Anodizing subcategory. Therefore, all indirect discharging facilities in this subcategory will remain subject to the applicable pretreatment standards in 40 CFR part 413 or 40 CFR part 433.

In this section, the Agency discusses only some of the flow cutoff options for each subcategory. EPA presents its analysis of a full range of flow cutoff options for indirect dischargers in each subcategory in the Technical Development Document.

Table XII.C-1 below summarizes the pounds of pollutants removed by the proposed options for indirect dischargers in each subcategory, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed options for indirect dischargers in each subcategory with proposed standards. EPA is not proposing pretreatment standards for the Non-Chromium Anodizing, Railroad Line Maintenance, and Shipbuilding Dry Dock subcategories for the reasons described later in this section. (See Section IX for summary tables for direct dischargers).

TABLE XII.C-1.—ANNUAL POUNDS OF POLLUTANT REMOVED BY THE PROPOSED PSES OPTION FOR INDIRECT DISCHARGERS BY SUBCATEGORY

Subcategory (number of facilities)	Selected option (flow cutoff)	Priority and nonconventional metals (lb-removed/yr)	Priority and nonconventional organics (lb-removed/yr)	Cyanide (lb-removed/ yr)
General Metals (3,055)	Option 2 (1 MGY)	28.1 million	7.7 million	284,000.
Metal Finishing Job Shops (1,514).	Option 2	2.4 million	47,000	1 million.
Printed Wiring Boards (621) ..	Option 2	2.6 million	14,000	230,000.
Steel Forming and Finishing (110).	Option 2	617,000	16,000	181.

TABLE XII.C-1.—ANNUAL POUNDS OF POLLUTANT REMOVED BY THE PROPOSED PSES OPTION FOR INDIRECT DISCHARGERS BY SUBCATEGORY—Continued

Subcategory (number of facilities)	Selected option (flow cutoff)	Priority and nonconventional metals (lb-removed/yr)	Priority and nonconventional organics (lb-removed/yr)	Cyanide (lb-removed/ yr)
Oily Waste (226)	Option 6 (2 MGY)	191,000	1.1 million	0.

TABLE XII.C-2.—ANNUAL COSTS AND ECONOMIC IMPACTS OF THE PROPOSED PSES OPTION FOR INDIRECT DISCHARGERS BY SUBCATEGORY

Subcategory (number of facilities)	Selected option (flow cutoff)	Annualized compliance costs for selected option (\$1996)	Economic im- pacts (facility closures) of selected option (percent of regulated subcategory *)
General Metals (3,055)	Option 2 (1 MGY)	1.57 billion	24 (<1%)
Metal Finishing Job Shops (1,514)	Option 2	178 million	128 (10%)
Printed Wiring Boards (621)	Option 2	147 million	7 (1%)
Steel Forming and Finishing (110)	Option 2	24 million	6 (6%)
Oily Waste (226)	Option 6 (2 MGY)	10 million	14 (<1%)

* Baseline closures will not be regulated and, therefore, are not included when estimating the percentage of regulatory closures (% regulatory closures = regulatory closures/all facilities in subcategory excluding baseline closures).

D. General Metals Subcategory

1. Need for PSES

As discussed in Section XII.A, one of the factors that EPA uses to determine the need for pretreatment standards is whether the pollutants discharged by an industry pass through a POTW. The Agency only applied the pass-through analysis to pollutants that it selected for regulation under BAT. For the General Metals subcategory, EPA determined that 13 pollutants pass through; and therefore, EPA is proposing pretreatment standards equivalent to BAT for these pollutants.

2. Selected PSES Options

As discussed in Section XII.B, in the Agency's engineering assessment of the best available technology for pretreatment of wastewater from the General Metals Subcategory, EPA considered the same technology options for PSES as it did for BAT with the additional consideration of a flow cutoff. The Agency is proposing BAT Option 2 with a 1 MGY flow cutoff for PSES. EPA is proposing Option 2 for many of the same reasons it selected that option for BPT and BAT (See Sections IX.A and XI.A) and provides additional rationale below.

EPA determined that Option 2 represented the best available technology and that Option 2 with a 1 MGY flow cutoff was economically achievable and greatly reduced the burden on POTWs. This option results in 24 facility closures (less than 1 percent of the indirect discharging

General Metals subcategory population).

See Section XVI.E for a discussion on job losses. Additionally, the Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level. Approximately 15 percent of the indirect discharging facilities in the General Metals subcategory employ chemical precipitation followed by a sedimentation (Option 2) while 1 percent employ microfiltration after chemical precipitation (Option 4).

EPA did evaluate Option 4 with a 1 MGY flow cutoff as a basis for establishing PSES. EPA estimates that the economic impact due to the additional controls at Option 4 levels would result in 92 facility closures (less than 1 percent of the indirect dischargers in this subcategory). See Section XVI.E for a discussion on job losses. While EPA does not have a bright line for determining what level of impact is economically achievable for the industry as a whole, EPA looked for a breakpoint that would mitigate adverse economic impacts without greatly affecting the toxic pound equivalents being removed under the proposed rule. By selecting Option 2 as PSES, EPA was able to reduce facility closures by more than two-thirds, while only losing a little over one percent of the toxic pound equivalents from control under Option 4. The Agency concluded that the additional facility closures associated with Option 4 do

not justify the insignificant additional pollutant removals achieved for indirect dischargers in this subcategory.

Considering the large number of indirect dischargers in the General Metals subcategory which have the potential to be covered by this proposed regulation, an important issue to the affected industry and to permit writers is the potentially enormous administrative burden associated with issuing permits or other control mechanisms for all of these facilities. Therefore, in developing this proposal, EPA has looked for means of reducing the administrative burden, reducing monitoring requirements, and reducing reporting requirements. In order to meet this end, the Agency is proposing a 1 million gallon per year (MGY) flow cutoff for the General Metals subcategory. Under this proposed option, facilities in the General Metals subcategory that discharge greater than 1 MGY of MP&M process wastewater would be subject to the proposed categorical pretreatment standards. Facilities in the General Metals subcategory that discharge 1 MGY or less would not be subject to MP&M PSES requirements. However, some of the facilities in this subcategory discharging under 1 MGY are currently covered by 40 CFR part 433, Metal Finishing PSES or PSNS, and these indirect dischargers would remain subject to those pretreatment standards and the general pretreatment standards at 40 CFR part 403.

The Agency determined that the 1 MGY flow cutoff was appropriate for the

General Metals subcategory based on several factors. First, and the most important factor, was the overall size of the General Metals subcategory. EPA estimates that there are over 26,000 indirect discharging facilities in the General Metals subcategory, of which 74 percent are not currently regulated by nationally established effluent guidelines. Establishing an MP&M pretreatment standard for all 26,000 facilities would greatly increase the number of permits or other control mechanisms for which local authorities are responsible. (EPA estimates that there are approximately 30,000 control mechanisms today.) EPA concluded that this increased permit burden was not reasonable and therefore explored potential flow cutoffs as a way to reduce the impact on POTW permitting authorities.

Second, EPA is proposing the 1 MGY flow cutoff for this subcategory based in part on the small number of pound-equivalents that would be removed by facilities with annual wastewater flows less than or equal to 1 MGY. EPA determined that 89 percent of the indirect discharging facilities in the General Metals subcategory discharge less than or equal to 1 MGY, yet these facilities are responsible for less than 6 percent of the total pound-equivalents currently discharged. If the Agency proposed pretreatment standards for facilities in the General Metals subcategory that discharged less than or equal to 1 MGY, it estimates average removals of only 22 pound-equivalents per facility per year for those facilities. EPA recently decided not to promulgate pretreatment standards for two industrial categories, Industrial Laundries (64 FR 45072) and Landfills (65 FR 3008), based on low removals of toxic pound equivalents by facilities in those categories. In the industrial laundries rule, EPA decided not to promulgate pretreatment standards based on 32 toxic pound equivalents per facility per year, and in the landfills effluent guidelines, EPA decided not to promulgate pretreatment standards for non-hazardous landfills based on the removal of only 14 toxic pound equivalents per facility per year. In both instances, the Agency considered that the small additional removals that would be achieved through regulation did not warrant adoption of national categorical standards.

The Agency concluded that regulation of facilities discharging only 22 pound-equivalents per year was not justified by the additional permitting burden associated with these facilities. Although this decision is based upon a subset of small facilities, and not an

entire subcategory as was done before, EPA believes this approach would allow Control Authorities to focus their efforts on the facilities discharging the vast majority of the pollutants, rather than dissipating their limited resources on sites contributing much less to the overall problem. EPA acknowledges that this may create an economic advantage for the smaller facilities, and solicits comment on this exclusion.

EPA also closely evaluated Option 2 with a 2 MGY flow cutoff for the General Metals subcategory. The Agency is not proposing this option because it does not reduce the number of facility closures (24) or further reduce the burden on control authorities in a significant way, and there is a significant number of pound equivalents associated with facilities discharging between 1 and 2 MGY. EPA determined that only 3 percent more of the facilities in this subcategory discharge between 1 and 2 MGY. This small number of facilities accounts for an additional 13 percent of the annual pollutant discharge load (in pound-equivalents). If EPA proposed Option 2 with a 2 MGY flow cutoff, the economic impacts would not be reduced. Based on these considerations, EPA is not proposing the 2 MGY flow cutoff for the General Metals subcategory. EPA concluded that the 1 MGY flow cutoff was the most appropriate option in terms of balancing POTW burden reduction with pollutant removals and mitigating economic impacts. Table XII.C-1 above shows the pounds of pollutants removed by the proposed option, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed option. Where these General Metals facilities discharge less than or equal to 1 MGY to a POTW, these pretreatment standards proposed today do not apply; however, facilities are still subject to other applicable pretreatment standards, including those established under parts 413 and 433. EPA requests comment on the 1 MGY flow cutoff and whether a higher or lower cutoff would be appropriate. EPA also requests comment on whether the flow cutoff should be different for facilities currently covered under 40 CFR part 413 or part 433 and whether or not that would create an unfair economic advantage for those facilities (e.g., captive electroplating shops in General Metals remaining regulated under 40 CFR part 433 but Metal Finishing Job Shops being regulated under the proposed MP&M rule).

3. Calculation of PSES

Based on the results of the pass-through analysis discussed in Section

XII.D.1, EPA is proposing pretreatment standards for existing sources in the General Metals subcategory equivalent to those limitations proposed for BAT for the pollutants listed at § 438.15 (as provided in the codified regulation that accompanies this preamble). EPA determined that all of the pollutants listed in § 438.15 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C. for a discussion of monitoring flexibility.) (See Section XXII.C. for a discussion of monitoring flexibility.)

4. Compliance Date

EPA is proposing to establish a three-year deadline for compliance with PSES. Design and construction of systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites.

E. Metal Finishing Job Shops Subcategory

1. Need for PSES

As discussed above in Section XII.A., one of the factors that EPA uses to determine the need for pretreatment standards is whether the pollutants discharged by an industry pass through a POTW. The Agency only applies the pass-through analysis to pollutants that it selected for regulation under BAT. For the Metal Finishing Job Shops subcategory, EPA determined that 12 pollutants pass through; and therefore, EPA is proposing pretreatment standards equivalent to BAT for these pollutants.

2. Selected PSES Option

As discussed in Section XII.B, in the Agency's engineering assessment of the best available technology for pretreatment of wastewater from the Metal Finishing Job Shops Subcategory, EPA considered the same technology options for PSES as it did for BAT with the additional consideration of a flow cutoff. The Agency is proposing BAT Option 2 for PSES for many of the same reasons it selected that option for BPT and BAT (See Section IX.B and XI.B) and provides additional rationale below. EPA is proposing that pretreatment standards based on Option 2 be applied to all facilities (i.e., no flow exclusion) for the Metal Finishing Job Shops subcategory.

The Agency estimates that 1,514 metal finishing job shop facilities currently discharge MP&M process wastewater to POTWs. The Agency projects that 128 of these facilities (10 percent of the indirect discharging facilities when baseline closures are taken into consideration) might close as a result of the proposed option (see Section XVI.E for a discussion on job losses). EPA concluded that this level of impact was economically achievable for the subcategory as a whole, but in an effort to minimize the impacts, considered several flow exclusions and compliance alternatives.

The Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level. Approximately 55 percent of the indirect discharging facilities in the Metal Finishing Job Shops subcategory employ chemical precipitation followed by sedimentation (Option 2) while less than 1 percent employ microfiltration after chemical precipitation (Option 4).

EPA did evaluate Option 4 as a basis for establishing PSES. EPA estimates that the economic impact due to the additional controls at Option 4 levels would result in 393 facility closures (32 percent of the indirect discharging facilities in this subcategory). (See Section XVI.E for a discussion on job losses). Thus, EPA rejected Option 4 as not economically achievable.

The Agency evaluated Option 2 with several levels of flow cutoffs, compliance options, and various combinations of the two. EPA analyzed the cutoffs and alternative compliance options in terms of reduction in economic impacts and quantity of toxic pound-equivalents discharged to the environment. EPA did not consider the reduction in POTW burden for this subcategory, unlike the General Metals subcategory, because EPA has already established PSES for all of the facilities in this subcategory under 40 CFR part 413 and 40 CFR part 433, and local control authorities would not have to develop entirely new permits (or other control mechanisms) for these facilities.

With respect to alternatives, first, EPA analyzed a 1 MGY flow cutoff, which would exclude 831 of the 1,514 estimated metal finishing job shop facilities (or 457 of the 1,231 facilities after baseline closures are removed from the analysis), and would reduce the economic impacts for 23 of the 128 facilities EPA projected would close under Option 2. This represents less than 2 percent of the 1,231 metal finishing jobs that operate in the

baseline and 18 percent of the projected facility closures under Option 2. This means that there are still 105 of the 128 facilities that EPA predicts to close with a 1 MGY flow cutoff. Further, EPA determined that the proposed regulation would control an average of 135 pound-equivalents per year from facilities discharging less than 1 MGY. This is higher than the level at which EPA has previously determined that discharges are not significant enough to warrant national regulation. Facilities discharging less than 1 MGY are associated with removals under the proposed option of about 61,000 pound-equivalents (or about 3 percent of the removals associated with the proposed option) at an incremental cost-effectiveness of about \$300 per pound-equivalent (\$1981). This is higher than has generally been associated with pretreatment standards in the past, though not necessarily higher than has been associated with the smaller facilities regulated with pretreatment standards in the past. This is to be expected since smaller facilities incur the same level of costs for monitoring as larger facilities and are sometimes forced to purchase larger capacity treatment units than they would need due to availability. Nonetheless, the Agency concluded that the pollutant reductions associated with Option 2 were feasible and achievable and the economic impacts were not substantially mitigated under the 1 MGY flow cutoff, so a 1 MGY flow cutoff is not being proposed for the Metal Finishing Job Shops subcategory. EPA requests comment on the use of a flow cutoff for this subcategory.

Second, EPA considered an option with (a) MP&M pretreatment standards for facilities discharging greater than 1 MGY and (b) a pollution prevention alternative for those discharging less than 1 MGY. Under this option, EPA would exclude from the MP&M numeric pretreatment standards based on Option 2 those metal finishing job shops discharging less than 1 MGY that choose to perform the pollution prevention and water conservation activities discussed in Section XXI.D (referred to as the "P2 alternative"). EPA would require the low flow facilities to continue to meet the pretreatment standards codified at 40 CFR part 433, which remain unchanged by today's proposal. All facilities discharging greater than 1 MGY (and those facilities discharging less than 1 MGY but not choosing the P2 alternative) would be subject to the MP&M pretreatment standards for this subcategory. In analyzing this option, EPA assumed that all facilities

discharging less than 1 MGY chose the P2 alternative. EPA's analysis shows that this option would reduce the facility closures for 23 of the 128 facilities EPA projected would close under Option 2 (no flow cutoff). As with the 1 MGY flow cutoff approach discussed above, this represents less than 2 percent of the 1,231 metal finishing jobs that operate in the baseline and about 18% of the closures projected by the proposed option. Further, although the P2 alternative would be somewhat effective in reducing toxic discharges, the option is not as protective as the numeric pretreatment standards based on Option 2. For facilities discharging less than 1 MGY, EPA estimates that the P2 alternative would control 59 pound-equivalents per facility per year (compared to 135 pound-equivalents per facility at Option 2). Thus, EPA is not proposing the option of a 1 MGY flow cutoff combined with a P2 alternative for today's proposal. EPA solicits comment and data on the pollutant reductions that can be achieved using the practices outlined in Section XXI.D.

Third, EPA analyzed a 2 MGY flow cutoff, which would exclude 1,024 facilities (66 percent) from MP&M pretreatment standards. Excluding a larger number of facilities (compared to the 1 MGY cutoff option) resulted in a smaller number of facility closures. For this option, EPA predicts that 59 facilities (approximately 5 percent of the indirect discharging facilities) might close. EPA estimates that the facilities discharging less than 2 MGY represent less than 12 percent of the total pound-equivalents currently discharged by facilities in this subcategory. For facilities discharging less than 2 MGY, EPA estimates that pretreatment standards would remove an average of 189 pound-equivalents per facility per year. While a 2 MGY flow cutoff reduced the number of facility closures, EPA concluded that the pollutant reductions associated with Option 2 were feasible and achievable and is not proposing a 2 MGY flow cutoff. EPA requests comment on the 2 MGY flow cutoff for this subcategory.

Fourth, EPA analyzed the 2 MGY flow cutoff with the pollution prevention alternative for those facilities below the cutoff. Under this option, EPA would exclude from the MP&M numeric pretreatment standards based on Option 2 those metal finishing job shops discharging less than 2 MGY that choose to perform the pollution prevention and water conservation activities discussed in Section XXI.D (*i.e.* the P2 alternative). EPA would require the low flow facilities to continue to meet the

pretreatment standards codified at 40 CFR part 433, which remain unchanged by today's proposal. All facilities discharging greater than 2 MGY (and those facilities discharging less than 2 MGY but not choosing the P2 alternative) would be subject to the MP&M pretreatment standards for this subcategory. In analyzing this option, EPA assumed that all facilities discharging less than 2 MGY chose the P2 alternative. EPA's analysis shows that this option may not reduce the number of facility closures any further than a 1 MGY flow cutoff (or 1 MGY P2 Alternative). The model facilities representing the facilities that close with flows of 2 MGY or less would require annualized costs to be reduced at least 68 percent in order to avoid closure. Since there are some compliance costs associated with implementing the practices of the P2 alternative, EPA estimates that these may close under the P2 Alternative. See Section XVI.E for a discussion on job losses. Although the P2 alternative reduces the number of facility closures as compared to an option with no flow cutoff, the option is not as protective as numeric pretreatment standards based on Option 2. For facilities discharging less than 2 MGY, EPA estimates that the P2 alternative would control an average of 67 pound-equivalents per facility per year (compared to 189 pound-equivalents per facility at Option 2). Thus, EPA is not proposing the option of 2 MGY flow cutoff combined with a P2 alternative. EPA solicits comment and data on the pollutant reductions that can be achieved using the practices outlined in Section XXI.D.

In summary, for all of the flow cutoff and P2 alternatives that EPA considered for this subcategory, the Agency identified no combination that would significantly reduce the economic impacts without also significantly reducing control of pollutants. At all the flow cutoffs and compliance alternatives, EPA concluded that the potential removals the Agency would be choosing to forego were above levels which EPA has previously determined insufficient to warrant national categorical pretreatment standards. Thus, EPA is not proposing a flow cutoff for this subcategory. Under the proposed option, all facilities in this subcategory would be subject to the pretreatment standards, which would reduce pass through of pollutants based on a technology EPA has determined to be technologically feasible and economically achievable. The Agency is soliciting comment on alternatives that might reduce the economic impact and

still provide acceptable environmental protection, including all of the options discussed above. See Section XXI.D for a discussion of the P2 alternative and Section XXIII for solicitation of comments on this issue. Table XII.C-1 above shows the pounds of pollutants removed by the proposed option, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed option.

3. Calculation of PSES

Based on the results of the pass-through analysis discussed in Section XII.E.1., EPA is proposing pretreatment standards for existing sources in the Metal Finishing Job Shops subcategory equivalent to those limitations proposed for BAT for the pollutants listed at § 438.25 (as provided in the codified regulation that accompanies this preamble). EPA determined that all of the pollutants listed in § 438.25 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXII.C. for a discussion of monitoring flexibility.)

4. Compliance Date

EPA is proposing to establish a three-year deadline for compliance with PSES. Design and construction of systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites.

F. Non-Chromium Anodizing Subcategory

1. Rationale for Not Proposing PSES

EPA is proposing to not establish PSES for the Non-Chromium Anodizing subcategory based on the economic impacts associated with Option 2 and the small quantity of toxic pollutants discharged by facilities in this subcategory remaining covered at an economically-achievable flow cutoff. EPA determined that 60 percent of the indirect discharging facilities in this subcategory would close as a result of complying with Option 2 based standards. Pretreatment standards for this subcategory based on either Option 2 or Option 4 would require facilities to remove large quantities of aluminum, a metal that is beneficial to POTWs because it assists in the flocculation of wastewater prior to sedimentation. Aluminum anodizers use a large quantity of water in their anodizing

processes and produce a wastewater that contains mostly aluminum. If the Agency proposed pretreatment standards for this subcategory, even without regulating aluminum, the standards would require facilities to install very large treatment systems (because of their high flow volume) and would result in the removal of large quantities of aluminum in order to remove small quantities of other metals such as nickel, zinc, and manganese. Therefore, EPA determined that the benefits of the aluminum discharge to POTWs outweighed the benefits gained from the removal of small quantities of other metals. In addition, because EPA has already promulgated pretreatment standards for non-chromium anodizers at 40 CFR parts 413 and 433, there is already a level of control for the small quantities of other metals being discharged along with the aluminum. Facilities subject to this subcategory must still comply with applicable PSES limitations (either 40 CFR part 413 or 40 CFR part 433). 40 CFR 438.40(b).

G. Printed Wiring Board Subcategory

1. Need for PSES

As discussed above in Section XII.A, one of the factors that EPA uses to determine the need for pretreatment standards is whether the pollutants discharged by an industry pass through a POTW. The Agency only applies the pass-through analysis to pollutants that it selected for regulation under BAT. For the Printed Wiring Board subcategory, EPA determined that 9 pollutants pass through; and therefore, EPA is proposing pretreatment standards equivalent to BAT for these pollutants.

2. Selected PSES Option

As discussed in Section XII.B above, in the Agency's engineering assessment of the best available technology for pretreatment of wastewater from the Printed Wiring Board Subcategory, EPA considered the same technology options for PSES as it did for BAT with the additional consideration of a flow cutoff exclusion. The Agency is proposing Option 2 for PSES for many of the same reasons it selected that option for BPT and BAT (See Section IX.D and XI.D) and provides additional rationale below. EPA also determined that pretreatment standards based on Option 2 for all facilities (*i.e.*, no flow exclusion) are appropriate for the Printed Wiring Board subcategory. The Agency estimates that 621 printed wiring board facilities currently discharge MP&M process wastewater to POTWs. The Agency projects that 7 of these facilities (1 percent of the current indirect

discharging population) might close as a result of the MP&M regulation (see Section XVI.E for a discussion on job losses). EPA concluded that this level of impact was economically achievable for the subcategory as a whole, but in an effort to minimize the impacts (and or maintain existing limitations for facilities where potential removals may not be sufficient to warrant national regulation), considered flow exemptions and compliance alternatives.

The Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level. Approximately 80 percent of the indirect discharging facilities in the Printed Wiring Board subcategory employ chemical precipitation followed by sedimentation (Option 2) while 2 percent employ microfiltration after chemical precipitation (Option 4).

EPA did evaluate Option 4 as a basis for establishing PSES. EPA estimates that the economic impact due to the additional controls at Option 4 levels would result in 18 more facility closures than Option 2 (total of 25 closures). EPA is not proposing to establish PSES limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. By selecting Option 2 as the basis for PSES, EPA reduced annualized compliance costs by \$75 million (1996\$) while only losing 0.5 percent of the toxic pound equivalents that would be removed under Option 4. The Agency concluded that the additional costs of Option 4 do not justify the additional insignificant amount of pollutant removals achieved for indirect dischargers in this subcategory. Therefore, EPA determined that Option 2 is the "best available" technology economically achievable for the Printed Wiring Board subcategory.

Although EPA concluded that the level of economic impact associated with Option 2 with no flow cutoff was economically achievable, it considered flow exclusions in an effort to minimize the impacts and/or maintain existing limitations for facilities where potential removals may not be significant enough to warrant national regulations. EPA did not consider the reduction in POTW burden for this subcategory, unlike the General Metals subcategory, because EPA has already established PSES for all of the facilities in this subcategory under 40 CFR parts 413 and 433, and local control authorities would not have to develop entirely new permits (or other control mechanisms) for these facilities. EPA analyzed a 1 MGY flow

cutoff, which would exclude 85 facilities, but would not reduce economic impacts. The same 7 facilities that EPA predicted to close with no flow cutoff are also expected to close with a 1 MGY flow cutoff. EPA determined that the proposed regulation would remove a total of less than 500 pound equivalents from the facilities discharging less than 1 MGY (after removing baseline closures from the analysis), or less than 10 pound-equivalents per facility. The incremental removals beyond current regulations is very small for facilities less than 1 MGY, and therefore EPA will consider the 1 MGY cutoff at final. However, the Agency concluded that the pollutant reductions associated with Option 2 were feasible and achievable, the economic impacts were not mitigated at a 1 MGY flow cutoff for this subcategory, and POTW burden would not be reduced with a flow cutoff, and is thus not proposing a 1 MGY flow cutoff for this subcategory. The Agency solicits comments on a 1 MGY flow cutoff, with the existing regulation applying to facilities under 1 MGY. EPA also solicits comment on the implementation and market consequences of this option. Table XII.C-1 above shows the pounds of pollutants removed by the proposed option, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed option.

3. Calculation of PSES

Based on the results of the pass-through analysis discussed in Section XII.G.1., EPA is proposing pretreatment standards for existing sources in the Printed Wiring Board subcategory equivalent to those limitations proposed for BAT for the pollutants listed at § 438.45 (as provided in the codified regulation that accompanies this preamble). EPA determined that all of the pollutants listed in § 438.45 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.)

4. Compliance Date

EPA is proposing to establish a three-year deadline for compliance with PSES. Design and construction of systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites.

H. Steel Forming and Finishing Subcategory

1. Need for PSES

As discussed above in Section XII.A, one of the factors that EPA uses to determine the need for pretreatment standards is whether the pollutants discharged by an industry pass through a POTW. The Agency only applies the pass-through analysis to pollutants that it selected for regulation under BAT. For the Steel Forming and Finishing subcategory, EPA determined that 13 pollutants pass through; and therefore, EPA is proposing pretreatment standards equivalent to BAT for these pollutants.

2. Selected PSES Option

As discussed in Section XII.B above, in the Agency's engineering assessment of the best available technology for pretreatment of wastewater from the Steel Forming and Finishing Subcategory, EPA considered the same technology options for PSES as it did for BAT with the additional consideration of a flow cutoff exclusion. The Agency is proposing Option 2 for PSES for many of the same reasons it selected that option for BPT and BAT (See Section IX.E and XI.E) and provides additional rationale below. EPA is proposing pretreatment standards based on Option 2 for all facilities (*i.e.*, no flow exclusion) for the Steel Forming and Finishing subcategory.

The Agency estimates that 110 steel forming and finishing facilities currently discharge MP&M process wastewater to POTWs. The Agency projects that 6 of these facilities (6 percent of the current indirect discharging population) might close as a result of the MP&M regulation (see Section XVI.E for a discussion on job losses). EPA concluded that this level of impact was economically achievable for the subcategory as a whole, but in an effort to minimize the impacts, considered flow exemptions and compliance alternatives.

The Agency believes that Option 2 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level. Approximately 63 percent of the indirect discharging facilities in the Steel Forming and Finishing subcategory employ chemical precipitation followed by sedimentation (Option 2) while no facilities employ microfiltration after chemical precipitation (Option 4).

EPA did evaluate Option 4 as a basis for establishing PSES. EPA estimates

that the economic impact due to the additional controls at Option 4 levels would result in the same number of facility closures (6) as Option 2. Therefore, EPA does consider Option 4 to be economically achievable for this subcategory. However, EPA is not proposing to establish PSES limitations based on Option 4 because it determined that Option 2 achieves nearly equivalent reductions in pound-equivalents for much less cost. By selecting Option 2 as the basis for PSES, EPA reduced annualized compliance costs by \$12 million (1996\$) while only losing 0.6 percent of the toxic pound equivalents that would be removed under Option 4. The Agency concluded that the additional costs of Option 4 do not justify the additional insignificant pollutant removals achieved for indirect discharging facilities in this subcategory. Therefore, EPA determined that Option 2 is the "best available" technology economically achievable for the Steel Forming and Finishing subcategory.

Although EPA concluded that the level of economic impact associated with Option 2 with no flow cutoff was economically achievable, it considered flow exclusions in an effort to minimize the impacts. EPA did not consider the reduction in POTW burden for this subcategory, unlike the General Metals subcategory, because EPA has already established PSES for all of the facilities in this subcategory under 40 CFR 420, and local control authorities would not have to develop entirely new permits (or other control mechanisms) for these facilities. However, to mitigate economic impacts (and or maintain existing limitations for facilities where potential removals may not be sufficient to warrant national regulation), EPA analyzed a 1 MGY flow cutoff, which would exclude 21 facilities (after accounting for baseline closures), and a 2 MGY flow cutoff which would exclude 30 facilities. Neither a 1 MGY flow cutoff nor a 2 MGY flow cutoff would reduce economic impacts. The same 6 facilities that EPA predicted to close with no flow cutoff are also expected to close with either a 1 or 2 MGY flow cutoff. However, a 1 MGY flow cutoff would eliminate less than 100 total pound-equivalents that would be removed under the proposed option, or less than 5 pound-equivalents per excluded facility, while a 2 MGY flow cutoff would eliminate less than 200 pound-equivalents total, or less than 7 pound-equivalents per excluded facility. These incremental removals beyond current regulations are very small, and therefore EPA will consider the 1 and 2

MGY cutoffs as final. Although a 3 MGY flow cutoff would reduce projected economic impacts by half (3 projected closures instead of 6), it would eliminate 2,157 pound-equivalent removals, or about 58 pound-equivalents per facility. These incremental removals are nearly twice the removals (on a per facility basis) than would have been realized by regulating industrial laundry and landfill facilities. Because EPA has concluded that the proposed option is feasible and achievable, and POTW burden would not be reduced with a flow cutoff, EPA is not proposing a flow cutoff for the Steel Forming and Finishing subcategory. However, EPA solicits comment on flow cutoffs at the 1, 2, and 3 MGY levels. Under these scenarios, existing regulations in 40 CFR part 420 would continue to apply to the excluded facilities. Unlike the facilities in the Metal Finishing Job Shops or Printed Wiring Board subcategories, the facilities in the MP&M Steel Forming & Finishing subcategory are covered in their current regulations as parts of several subcategories, thus creating problems for control authorities in implementing the appropriate requirements. EPA solicits comment on implementation and market consequences of these options. Table XII.C-1 above shows the pounds of pollutants removed by the proposed option, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed option.

3. Calculation of PSES

Based on the results of the pass-through analysis discussed in Section XII.H.1., EPA is proposing pretreatment standards for existing sources in the Steel Forming and Finishing subcategory equivalent to those limitations proposed for BAT for the pollutants listed at § 438.55 (as provided in the codified regulation that accompanies this preamble). EPA determined that all of the pollutants listed in § 438.55 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.)

4. Compliance Date

EPA is proposing to establish a three-year deadline for compliance with PSES. Design and construction of

systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites.

I. Oily Wastes Subcategory

1. Need for PSES

As discussed in Section XII.A, two of the factors that EPA uses to determine the need for pretreatment standards is whether the pollutants discharged by an industry pass through or interfere with a POTW. For the Oily Wastes subcategory, EPA is proposing pretreatment standards equivalent to BAT for the following three pollutants or pollutant parameters: TOC, TOP and total sulfide.

2. Selected PSES Option

As discussed in Section XII.B, in the Agency's engineering assessment of the best available technology for pretreatment of wastewater from the Oily Wastes Subcategory, EPA considered the same technology options for PSES as it did for BAT with the additional consideration of a flow cutoff exclusion. The Agency is proposing BAT Option 6 with a 2 MGY flow cutoff for PSES. The Agency is proposing Option 6 for PSES for many of the same reasons it selected that option for BPT and BAT (See Section IX.F and XI.F) and provides additional rationale below. EPA is proposing the 2 MGY flow cutoff primarily to reduce the burden on POTWs, and solicits comment on a 3 MGY cutoff as a possible alternative to further reduce impacts.

EPA determined that Option 6 represented the best available technology and that Option 6 with a 2 MGY flow cutoff was economically achievable and greatly reduced the burden on POTWs. This option results in 14 facility closures (less than 1 percent of the indirect discharging Oily Wastes subcategory population). See Section XVI.E for a discussion on job losses. Additionally, the Agency believes that Option 6 represents the "best available" technology as it achieves a high level of pollutant control, treating all priority pollutants to very low levels, often at or near the analytical minimum level. According to EPA's detailed questionnaires, approximately 44 percent of the indirect discharging facilities in the Oily Wastes subcategory employ oil-water separation by chemical emulsion breaking followed by gravity separation and oil skimming (Option 6) while no facilities employ ultrafiltration (Option 8).

EPA did evaluate BPT Option 8 with a 2 MGY flow cutoff as a basis for establishing PSES more stringent than the level of control being proposed

today. EPA estimates that the economic impact due to the additional controls at Option 8 levels would result in the same number of facility closures (14) as Option 6. Therefore, EPA does consider Option 8 to be economically achievable for this subcategory. However, based on the available data base, EPA is not proposing to establish PSES limitations based on Option 8 because it removes fewer pound-equivalents than Option 6. Therefore, the Agency determined that Option 6 is the "best available" technology economically achievable for the removal of priority pollutants from wastewater generated at Oily Wastes subcategory facilities.

Considering the large number of indirect dischargers which have the potential to be covered by this proposed regulation, an important issue to the affected industry and to permit writers is the potentially enormous administrative burden associated with issuing permits or other control mechanisms for all these facilities. Therefore, in developing this proposal, EPA has looked for means of reducing the administrative burden, reducing monitoring requirements, and reducing reporting requirements. In order to meet this end, the Agency is proposing a 2 MGY flow cutoff for the Oily Wastes subcategory. Under this proposed option, facilities in the Oily Wastes subcategory that discharge greater than 2 MGY per year of MP&M process wastewater would be subject to the proposed pretreatment standards. However, those facilities in the Oily Wastes subcategory that discharge 2 MGY or less would not be subject to MP&M PSES requirements. These facilities would, however, remain subject to the existing general pretreatment standards at 40 CFR Part 403.

The Agency is proposing the 2 MGY flow cutoff exclusion for the Oily Wastes subcategory based on several factors. First, and the most important factor, was the overall size of the Oily Wastes subcategory. EPA estimates that there are approximately 28,500 indirect discharging facilities in the Oily Wastes subcategory, of which over 99 percent are not currently regulated by categorical pretreatment standards. Establishing an MP&M pretreatment standard for all 28,500 facilities would nearly double the number of permits that local authorities are currently responsible for. EPA concluded that this increased permit burden was not reasonable given the projected loadings reductions and therefore explored potential flow cutoffs as a way to reduce the impact on POTW permitting authorities.

Second, EPA is proposing the 2 MGY flow cutoff for this subcategory based in part on the small number of pound-equivalents that would be removed by facilities with annual wastewater flows less than or equal to 2 MGY. EPA determined that after removing facilities that close in the baseline ("baseline closures") from the analysis, over 99 percent of the indirect discharging facilities in the Oily Wastes subcategory discharge less than or equal to 2 MGY. EPA estimates average removals of only 2 pound-equivalents per facility per year for these facilities.

In addition, EPA determined that for those facilities in this subcategory that discharge between 1 and 2 MGY the MP&M regulation would remove an average of 31 pound-equivalents per year per facility. These reductions, as discussed previously, are lower than those projected for industrial laundries and landfills, for which EPA determined national regulation was not warranted. The Agency concluded that regulation of facilities discharging only 2 pound-equivalents per year (with those discharging between 1 and 2 MGY at 31 pound-equivalents per year) was not justified by the additional permitting burden associated with these facilities. EPA believes this approach would allow Control Authorities to focus their efforts on the facilities discharging the vast majority of the pollutants, rather than dissipating their limited resources on sites contributing much less to the overall problem. EPA does note, however, that the indirect discharging facilities that discharge less than or equal to 2 MGY are responsible for an estimated 78 percent of the total pound-equivalents currently discharged (approximately 51,000 of the 65,000 pound-equivalents discharged after removing baseline closures from the analysis).

EPA also closely evaluated Option 6 with a 3 MGY flow cutoff for the Oily Waste subcategory. Based on EPA's data collection efforts, after removing facilities that close in the baseline ("baseline closures") from the analysis, over 99 percent of the indirect discharging facilities in the Oily Wastes subcategory discharge less than or equal to 3 MGY. The Agency determined that after removing baseline closures from the analysis there are approximately 64 indirect discharge facilities in this subcategory between 2 and 3 MGY and that they discharge an average of 24 pound-equivalents per year per facility. If EPA proposed Option 2 with a 3 MGY flow cutoff, the economic impacts would decrease slightly (12 facility closures rather than 14 at the proposed option). The Agency concluded that the

3 MGY flow cutoff was not necessary to reduce POTW burden for the Oily Wastes subcategory although it would reduce the economic impact somewhat. EPA solicits comment on a 3 MGY cutoff, but notes that these approximately 28,160 facilities are responsible for an estimated 81 percent of the total pound-equivalents currently discharged (approximately 52,500 of the 65,000 pound-equivalents discharged after removing baseline closures from the analysis).

Therefore, EPA is proposing the 2 MGY flow cutoff but is also seriously considering a 3 MGY cutoff. EPA believes this approach would allow Control Authorities to focus their efforts on the facilities discharging the vast majority of the pollutants, rather than dissipating their limited resources on sites contributing much less to the overall problem. Table XII.C-1 above shows the pounds of pollutants removed by the proposed option, and Table XII.C-2 summarizes the costs and economic impacts associated with the proposed option (both tables include facilities that close in the baseline). EPA's methodology for identifying baseline closures is discussed in Section XVI.

3. Calculation of PSES

Based on the results of the pass-through analysis discussed in Section XII.I.1., EPA is proposing pretreatment standards for existing sources in the Oily Wastes subcategory equivalent to those limitations proposed for BAT for the pollutants listed at § 438.65 (as provided in the codified regulation that accompanies this preamble). EPA is proposing a pretreatment standard for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing pretreatment standards for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.)

4. Compliance Date

EPA is proposing to establish a three-year deadline for compliance with PSES. Design and construction of systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites.

J. Railroad Line Maintenance Subcategory

1. Rationale for Not Proposing PSES

EPA is proposing to not establish PSES for the Railroad Line Maintenance subcategory based on the small quantity

of toxic pollutants discharged by facilities in this subcategory. The Agency estimates that there are 799 indirect discharging railroad line maintenance facilities that currently discharge 1,800 pound-equivalents per year to our nation's waters (taking into account removals at the POTW), or just over 2 pound-equivalents per facility per year. Based on this analysis, EPA preliminarily concluded that there is no need to develop nationally applicable regulations for this subcategory due to the low levels of pollutants discharged by facilities in this subcategory.

K. Shipbuilding Dry Dock Subcategory

1. Rationale for Not Proposing PSES

EPA is proposing to not establish PSES for the Shipbuilding Dry Dock subcategory based on the small number of facilities in this subcategory and on the small quantity of toxic pollutants removed by the technology options evaluated by EPA for this proposal. The Agency estimates that there are 6 indirect discharging facilities that have one or more dry docks that currently discharge 852 pound-equivalents per year to our nation's waters (taking into account removals at the POTW). On a national basis, Option 8 (ultrafiltration + P2) removed less than 1 pound-equivalent per year while Option 10 (DAF plus P2) only removed 26 pound-equivalents per year (or less than 5 pound-equivalents removed per facility per year). The Agency estimates that all of these facilities currently have DAF treatment in place. EPA determined that nationally-applicable regulations are unnecessary at this time because of the small number of facilities in this subcategory and based on the small amount of toxic pounds removed by the technology options evaluated by the Agency. The Agency believes that pretreatment local limits implemented on a case-by-case basis can more appropriately address any individual toxic parameters present at these six facilities.

XIII. New Source Performance Standards (NSPS) and Pretreatment Standards for New Sources (PSNS)

Section 307(c) of the Act calls for EPA to promulgate pretreatment standards for new sources (PSNS) at the same time that it promulgates new source performance standards (NSPS). New facilities have the opportunity to incorporate the best available demonstrated technologies including process changes, in-plant controls, and end-of-pipe treatment technologies.

The same technologies discussed previously for BAT and PSES are

available as the basis for NSPS and PSNS. Since new sites have the potential to install pollution prevention and pollution control technologies more cost effectively than existing sources, EPA strongly considered the more advanced treatment options for NSPS and PSNS. The Agency discusses its analysis of these more stringent options for NSPS and PSNS on a subcategory-by-subcategory basis below.

A. NSPS for the General Metals Subcategory

1. Need for NSPS

EPA expects that new facilities in the General Metals subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.A.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 4. The Agency determined that Option 4 is the best available demonstrated technology for the removal of pollutants in this subcategory. EPA's analytical data shows that Option 4 is capable of achieving much lower long-term averages than Option 2 for several of the metal pollutants of concern. In addition, EPA's data shows that microfiltration greatly reduces the variability in the concentration of the metal pollutants in the treatment effluent. Although Option 4 costs \$54,500 (1996\$) more than Option 2 annually for a new facility with a wastewater flow of 1.1 MGY (the wastewater flow for a representative direct discharging facility in the General Metals subcategory), EPA is proposing Option 4 because of the lower levels of metal pollutants in the wastewater effluent. EPA noted in the discussion of its consideration of this technology for BPT/BAT that it is not being proposed for BPT because the additional removals, while large when considered across the entire population of existing facilities, were not significant on a per facility basis, and because of concerns with potential increased loadings (relative to Option 2) of COD and organic pollutants. EPA requests comment on basing NSPS on Option 2 for the same reasons it is proposing to base BPT/BAT on Option 2.

The Agency also strongly considered proposing NSPS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an

ultrafilter. The Agency is soliciting comment and data on this NSPS option for the final rule.

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations for all of the pollutants that it proposed BPT and BAT limitations for in this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.16. (See Section XXI.C. for a discussion of monitoring flexibility.) EPA based these proposed regulations on EPA sampling episodes at four facilities that employed Option 4 technologies. Three of the four facilities are General Metals facilities while the fourth is a printed wiring board manufacturer. The Agency used the same statistical methods for determining the effluent limitations for NSPS as it described in Section VIII. Because of the limited number of facilities that EPA has analytical sampling data on for Option 4, the Agency is soliciting comment and data on Option 4 technologies. Specifically, the Agency is interested in wastewater treatment data from MP&M facilities employing Option 4 technologies (ultrafiltration for oil and grease removal and microfiltration following chemical precipitation for removal of TSS and metals). See Section XXIII "Solicitation of Comments."

4. NSPS Analysis

The Agency also performed an economic analysis in order to determine if Option 4 presented a barrier to entry for new facilities in the General Metals subcategory. EPA determined that the cost of compliance with NSPS based on Option 4 would make up only 0.04 percent of a new facility's projected revenues. Therefore, EPA concluded that NSPS based on Option 4 would not create a barrier to entry.

B. PSNS for the General Metals Subcategory

1. Need for PSNS

EPA expects that new facilities in the General Metals subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for PSNS regulation is the same as the need for PSES regulation. (See Section XII.D.1).

2. Selected PSNS Option

EPA is proposing Pretreatment Standards for New Sources for this subcategory based on BAT Option 4 for the same reasons it is proposing this option for NSPS. EPA is also requesting comment on basing PSNS on Option 2, as with NSPS. In addition, EPA is

proposing a 1 MGY flow cutoff exclusion for PSNS. This is the same flow cutoff level that EPA is proposing for PSES for the existing indirect discharging facilities in the General Metals subcategory. The Agency concluded that a 1 MGY flow cutoff is appropriate for new indirect discharging facilities in the General Metals subcategory based on the potential POTW permitting burden that would be associated with developing and then maintaining permits for new sources with low flows and the likelihood that these facilities discharge a small amount of pound-equivalents at these low flow rates. The Agency assumes that the pound-equivalents removed per facility for new facilities with flows below or equal to 1 MGY would be even lower than the 22 pound-equivalents per facility for similarly sized existing sources in this subcategory. The Agency concluded that a similar (or even smaller) amount of pollutant removal is not significant and does not justify regulation of these facilities by a national categorical regulation. EPA solicits comment on whether it is appropriate to exclude new sources that discharge process wastewater equal to 1 million gallons or less for the reasons described above.

The Agency also strongly considered proposing PSNS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this PSNS option for the final rule.

3. Calculation of PSNS Limitations

The Agency is proposing PSNS limitations for the same pollutants that it proposed PSES regulations. The PSNS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.17. EPA determined that all of the pollutants listed in § 438.17 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from MP&M facilities. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C. for a discussion of monitoring flexibility.) The Agency based these proposed limitations on the same four EPA sampling episodes that EPA discussed in Section XIII.A.3.

4. PSNS Analysis

Like NSPS, the Agency determined that the cost of compliance with PSNS based on Option 4 would make up only 0.09 percent of a new facility's projected revenues and concluded that this would not create a barrier to entry.

C. NSPS for the Metal Finishing Job Shops Subcategory

1. Need for NSPS

EPA expects that new facilities in the Metal Finishing Job Shops subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.B.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 4. The Agency determined that Option 4 is the best available demonstrated technology for the removal of pollutants in this subcategory. EPA's analytical data shows that Option 4 is capable of achieving much lower long term averages than Option 2 for several of the metal pollutants of concern. In addition, EPA's data shows that microfiltration greatly reduces the variability in the concentration of the metal pollutants in the treatment effluent. Although Option 4 costs \$72,500 (1996\$) more than Option 2 annually for a new facility with a wastewater flow of 6.0 MGY (the wastewater flow for a representative direct discharging facility in the Metal Finishing Job Shops), EPA is proposing Option 4 because of the lower levels of metal pollutants in the treated wastewater effluent. EPA is not proposing Option 4 for BPT for this subcategory because of the lack of significant overall pollutant removals achieved, and the fact that it removes less COD, O&G, and organic pollutants. EPA requests comment on using Option 2 as the basis for NSPS.

The Agency also strongly considered proposing NSPS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this NSPS option for the final rule.

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations for all of the pollutants that it proposed BPT and BAT limitations for in this subcategory. The NSPS limitations for this subcategory can be

found in the proposed rule (which accompanies this preamble) at § 438.26. (See Section XXI.C for a discussion of monitoring flexibility.) EPA based these proposed regulations on the same four EPA sampling episodes that it used to calculate NSPS for the General Metals subcategory. See Section XIII.A.

4. NSPS Analysis

The Agency also performed an economic analysis in order to determine if Option 4 presented a barrier to entry for new facilities in the Metal Finishing subcategory. EPA determined that the cost of compliance with NSPS based on Option 4 would make up only 1.41 percent of a new facility's projected revenues. Therefore, EPA concluded that NSPS based on Option 4 would not create a barrier to entry.

D. PSNS for the Metal Finishing Job Shops Subcategory

1. Need for PSNS

EPA expects that new facilities in the Metal Finishing Job Shops subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for PSNS regulation is the same as the need for PSES regulation. (See Section XII.E.1).

2. Selected PSNS Option

EPA is proposing Pretreatment Standards for New Sources for this subcategory based on BAT Option 4 for the same reasons it is proposing this option for NSPS. EPA is also requesting comment on PSNS limits based on Option 2. In addition, EPA is not proposing a flow cutoff exclusion for PSNS for this subcategory for the same reasons that it did not propose a flow cutoff for PSES, but is requesting comment on flow cutoffs of 1 and 2 MGY, as with PSES. (See Section XII.E.)

The Agency also strongly considered proposing PSNS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this PSNS option for the final rule.

3. Calculation of PSNS Limitations

The Agency is proposing PSNS limitations for the same pollutants that it proposed PSES regulations. The PSNS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.27. EPA determined that all of the pollutants listed in § 438.27 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a

limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from facilities in this subcategory. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.) The Agency based these proposed limitations on the same four EPA sampling episodes that EPA discussed in Section XIII.A.3.

4. PSNS Analysis

Like NSPS, the Agency determined that the cost of compliance with PSNS based on Option 4 would make up 4.64 percent of a new facility's projected revenues and expects that this would not create a barrier to entry. EPA notes that this is a higher percentage than for other subcategories and solicits comment on whether EPA should consider Option 2 for these facilities.

E. NSPS for the Non-Chromium Anodizing Subcategory

1. Need for NSPS

EPA expects that new facilities in the Non-Chromium Anodizing subcategory will discharge similar quantities of the same pollutants that existing sources discharge. EPA notes that it did not identify any existing direct dischargers in this subcategory and that estimates of costs and pollutant loadings were transferred from the best performing indirect dischargers in this subcategory (see Section IX.C). Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.C.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 2. As discussed in the BPT analysis for this subcategory, non-chromium anodizers discharge large quantities of aluminum but have very low levels of other metals in their wastewater. EPA determined that Option 2 is capable of removing most of the aluminum discharged by facilities in this subcategory and that any additional removals achieved by Option 4 are not justified by the additional cost.

The Agency also evaluated not proposing NSPS for facilities in this subcategory and instead continuing to require compliance with NSPS limitations established under 40 CFR part 433. However, the Agency has tentatively rejected this option because these new proposed NSPS limitations require an increased removal of TSS and

the Agency feels that the pollutants proposed for regulation here are more appropriate for the non-chromium anodizing industry. The NSPS limitations established in 40 CFR part 433 require facilities to meet an average monthly discharge of 31 mg/L of TSS and allow for a maximum daily discharge of 60 mg/L. These proposed MP&M limitations require non-chromium anodizers to meet an average monthly discharge for TSS of 22 mg/L and allow for a monthly maximum discharge of 52 mg/L. EPA believes that the costs associated with NSPS are justified by the additional removal of TSS from this subcategory. In addition, 40 CFR part 433 requires non-chromium anodizers to meet effluent limitations for 7 metal pollutants. EPA's data show that these seven metals are present only in very small quantities at non-chromium anodizing facilities. In 40 CFR part 433, EPA did not establish a limit for aluminum, the metal found in the largest quantity in non-chromium anodizers' wastewater. The Agency has determined that direct discharging facilities in the Non-Chromium Anodizing subcategory should have a limit for aluminum and thus is proposing to cover them here. The Agency notes that this will reduce the number of pollutants that non-chromium anodizers would have to monitor for.

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations for all of the pollutants that it proposed BPT and BAT limitations for in this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.36. (See Section XXI.C for a discussion of monitoring flexibility.)

4. NSPS Analysis

A barrier to entry analysis is typically performed for new facilities by using existing facilities as a model. However, there are no existing direct dischargers in this subcategory. Therefore, the Agency could not perform an economic analysis in order to determine if Option 2 presented a barrier to entry for new facilities in the Non-Chromium Anodizing subcategory.

F. PSNS for the Non-Chromium Anodizing Subcategory

1. Need for PSNS

EPA expects that new facilities in the Non-Chromium Anodizing subcategory will discharge similar quantities of the same pollutants that existing sources discharge and therefore EPA is not

proposing pretreatment standards for new sources for this subcategory for the same reasons it is not proposing PSES for this subcategory. See Section XII.F and VI.C.3.

G. NSPS for the Printed Wiring Board Subcategory

1. Need for NSPS

EPA expects that new facilities in the Printed Wiring Board subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.D.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 4. The Agency determined that Option 4 is the best available demonstrated technology for the removal of pollutants in this subcategory. EPA's analytical data shows that Option 4 is capable of achieving much lower long term averages than Option 2 for several of the metal pollutants of concern. In addition, EPA's data shows that microfiltration greatly reduces the variability in the concentration of the metal pollutants in the treatment effluent. Although Option 4 costs \$162,000 more than Option 2 annually for a new facility with a wastewater flow of 25.5 MGY (the wastewater flow for a representative direct discharging facility in the Printed Wiring Board subcategory), EPA is proposing Option 4 because of the lower levels of metal pollutants in the wastewater effluent. EPA is not proposing Option 4 for BPT/BAT because of the lack of significant overall additional removals and the fact that it removes less COD, O&G, and organic pollutants, relative to Option 2. EPA also requests comment on basing NSPS on Option 2.

The Agency also strongly considered proposing NSPS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this NSPS option for the final rule.

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations for all of the pollutants that it proposed BPT and BAT limitations for in this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.46.

(See Section XXI.C for a discussion of monitoring flexibility.) EPA based these proposed regulations on the same four EPA sampling episodes that it used to calculate NSPS for the General Metals subcategory. (See Section XIII.A.3). As mentioned above, EPA collected analytical wastewater treatment data from a printed wiring board manufacturer that employed this technology.

4. NSPS Analysis

The Agency also performed an economic analysis in order to determine if Option 4 presented a barrier to entry for new facilities in the Printed Wiring Board subcategory. EPA determined that the cost of compliance with NSPS based on Option 4 would make up only 0.02 percent of a new facility's projected revenues. Therefore, EPA concluded that NSPS based on Option 4 would not create a barrier to entry.

H. PSNS for the Printed Wiring Board Subcategory

1. Need for PSNS

EPA expects that new facilities in the Printed Wiring Board subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for PSNS regulation is the same as the need for PSES regulation. (See Section XII.G.1).

2. Selected PSNS Option

EPA is proposing Pretreatment Standards for New Sources for this subcategory based on BAT Option 4 for the same reasons it is proposing this option for NSPS. It is also requesting comment on PSNS based on Option 2. As was the case for PSES, EPA is not proposing a flow cutoff exclusion for this subcategory for the same reasons discussed in Section XII.G.2, but is requesting comment on a flow cutoff of 1 MGY, as with PSES.

The Agency also strongly considered proposing PSNS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this PSNS option for the final rule.

3. Calculation of PSNS Limitations

The Agency is proposing PSNS limitations for the same pollutants that it proposed PSES regulations. The PSNS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.47. EPA determined that all of the pollutants listed in § 438.47 (except for

Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from facilities in this subcategory. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.) EPA determined that all of these pollutants pass through POTWs. The Agency based these proposed limitations on the same four EPA sampling episodes that EPA discussed in Section XIII.A.3. As mentioned above, EPA collected analytical wastewater treatment data from a printed wiring board manufacturer that employed this technology.

4. PSNS Analysis

Like NSPS, the Agency determined that the cost of compliance with PSNS based on Option 4 would make up only 0.20 percent of a new facility's projected revenues and concluded that this would not create a barrier to entry.

I. NSPS for the Steel Forming and Finishing Subcategory

1. Need for NSPS

EPA expects that new facilities in the Steel Forming and Finishing subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.E.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 4. The Agency determined that Option 4 is the best available demonstrated technology for the removal of pollutants in this subcategory. EPA's analytical data shows that Option 4 is capable of achieving much lower long-term averages than Option 2 for several of the metal pollutants of concern. In addition, EPA's data shows that microfiltration greatly reduces the variability in the concentration of the metal pollutants in the treatment effluent. Although Option 4 costs \$42,400 more than Option 2 annually for a new facility with a wastewater flow of 18.4 MGY (the wastewater flow for a representative direct discharging facilities in the Steel Forming and Finishing subcategory), EPA determined that the additional cost of Option 4 are justified by the lower levels of metal pollutants in the wastewater effluent.

The Agency also strongly considered proposing NSPS based on ultrafiltration for oil and grease removal and chemical precipitation followed by a clarifier for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this NSPS option for the final rule.

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations for all of the pollutants that it proposed BPT and BAT limitations for in this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.56. (See Section XXI.C for a discussion of monitoring flexibility.) The Agency based these proposed limitations on the same four EPA sampling episodes that EPA discussed in Section XIII.A.3.

4. NSPS Analysis

The Agency also performed an economic analysis in order to determine if Option 4 presented a barrier to entry for new facilities in the Steel Forming and Finishing subcategory. EPA determined that the cost of compliance with NSPS based on Option 4 would make up only 0.14 percent of a new facility's projected revenues. Therefore, EPA concluded that NSPS based on Option 4 would not create a barrier to entry.

J. PSNS for the Steel Forming and Finishing Subcategory

1. Need for PSNS

EPA expects that new facilities in the Steel Forming and Finishing subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for PSNS regulation is the same as the need for PSES regulation. (See Section XII.H.1).

2. Selected PSNS Option

EPA is proposing Pretreatment Standards for New Sources for this subcategory based on BAT Option 4 for the same reasons it is proposing this option for NSPS. In addition, EPA is not proposing a flow cutoff exclusion for PSNS for this subcategory for the same reasons that it did not propose a flow cutoff for PSES, but is requesting comment on flow cutoffs of 1, 2, and 3 MGY as with PSES. (See Section XII.H.)

The Agency also strongly considered proposing PSNS based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the

oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this PSNS option for the final rule.

3. Calculation of PSNS Limitations

The Agency is proposing PSNS limitations for the same pollutants that it proposed PSES regulations. The PSNS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.57. EPA determined that all of the pollutants listed in § 438.57 (except for Total Sulfide, TOC, and TOP) pass through POTWs. EPA is proposing a limitation for total sulfide based on potential POTW interference or upset associated with discharges of total sulfide from facilities in this subcategory. EPA is proposing limitations for TOC and TOP as part of a compliance alternative for organic pollutant discharges. (See Section XXI.C for a discussion of monitoring flexibility.) The Agency based these proposed limitations on the same four EPA sampling episodes that EPA discussed in Section XIII.A.3.

4. PSNS Analysis

Like NSPS, the Agency determined that the cost of compliance with PSNS based on Option 4 would make up only 0.17 percent of a new facility's projected revenues and concluded that this would not create a barrier to entry.

K. NSPS for the Oily Wastes Subcategory

1. Need for NSPS

EPA expects that new facilities in the Oily Wastes subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.F.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 6, oil-water separation by chemical emulsion breaking, gravity separation, and oil skimming. The Agency determined that Option 6 is the best available demonstrated technology for the removal of pollutants in this subcategory and is proposing this option for the same reasons it selected this option for BPT and BAT. (See Section IX.F.2).

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations equivalent to those proposed for BPT for this subcategory. The NSPS limitations for this subcategory can be

found in the proposed rule (which accompanies this preamble) at § 438.66. (See Section XXI.C for a discussion of monitoring flexibility.)

4. NSPS Analysis

Since EPA is proposing to set NSPS equal to BAT (Option 6) and this option is determined to be economically achievable for these facilities under BAT, EPA concluded that NSPS based on Option 6 would not create a barrier to entry.

L. PSNS for the Oily Wastes Subcategory

1. Need for PSNS

EPA expects that new facilities in the Oily Wastes subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for PSNS regulation is the same as the need for PSES regulation. (See Section XII.I.1).

2. Selected PSNS Option

EPA is proposing Pretreatment Standards for New Sources for this subcategory based on BAT Option 6 for the same reasons it is proposing this option for NSPS. In addition, EPA is proposing a 2 MGY flow cutoff exclusion for PSNS with serious consideration of a 3 MGY flow cutoff as well. This is the same flow cutoff level that EPA is proposing for PSES for the existing indirect discharging facilities in the Oily Wastes subcategory. The Agency is proposing a 2 MGY flow cutoff for new indirect discharging facilities in the Oily Wastes subcategory based on the potential POTW permitting burden that would be associated with developing and then maintaining permits for new sources with low flows and the likelihood that these facilities discharge a small amount of pound-equivalents at these low flow rates. The Agency assumes that the pound-equivalents per facility for new facilities with flows below or equal to 2 MGY would be even lower than the 2 pound-equivalents per facility for similarly sized existing sources in this subcategory. The Agency concluded that a similar (or even smaller) amount of pollutant removal is not justified by the cost of the regulation for new indirect Oily Waste facilities discharging less than or equal to 2 MGY.

3. Calculation of PSNS Limitations

The Agency is proposing PSNS limitations equivalent to PSES for the same pollutants that it proposed PSES regulations. The PSNS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.67. (See Section XII.I.3. for PSES discussion and see

Section XXI.C for a discussion of monitoring flexibility.)

4. PSNS Analysis

Since EPA is proposing to set PSNS equal to PSES (Option 6) and this option is determined to be economically achievable for these facilities under PSES, the Agency concluded that this would not create a barrier to entry.

M. NSPS for the Railroad Line Maintenance Subcategory

1. Need for NSPS

EPA expects that new facilities in the Railroad Line Maintenance subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.G.1.)

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 10, dissolved air flotation plus in-process flow control and pollution prevention. The Agency determined that Option 10 is the best available demonstrated technology for the removal of pollutants in this subcategory and is proposing this option for the same reasons it selected this option for BPT and BAT. (See Section IX.G.2).

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations equivalent to those proposed for BPT for this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.76. (See Section XXI.C for a discussion of monitoring flexibility.)

4. NSPS Analysis

EPA notes that railroad line maintenance facilities do not have revenue reported at the facility level, and it is therefore not possible to compare costs as a percent of facility revenue for new and existing facilities in this subcategory. In addition, EPA is proposing to set NSPS equal to BAT (Option 10) and has determined this option is economically achievable for these facilities under BAT, therefore, EPA concluded that NSPS based on Option 10 would not create a barrier to entry.

N. PSNS for the Railroad Line Maintenance Subcategory

1. Rationale for Not Proposing PSNS

EPA expects that new facilities in the Railroad Line Maintenance subcategory will discharge similar quantities of the

same pollutants that existing sources discharge. Therefore, EPA is proposing to not establish PSNS for this subcategory for the same reasons that it did not propose PSES. (See Section XII.J.1).

O. NSPS for the Shipbuilding Dry Dock Subcategory

1. Need for NSPS

EPA expects that new facilities in the Shipbuilding Dry Dock subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, the need for NSPS regulation is the same as the need for BPT regulation. (See Section IX.H.1).

2. Selected NSPS Option

EPA is proposing New Source Performance Standards for this subcategory based on BAT Option 10, dissolved air flotation plus in-process flow control and pollution prevention. The Agency determined that Option 10 is the best available demonstrated technology for the removal of pollutants in this subcategory and is proposing this option for the same reasons it selected this option for BPT. (See Section IX.H.2).

3. Calculation of NSPS Limitations

The Agency is proposing NSPS limitations equivalent to those proposed for BPT for this subcategory. The NSPS limitations for this subcategory can be found in the proposed rule (which accompanies this preamble) at § 438.76. (See Section XXI.C for a discussion of monitoring flexibility.)

4. NSPS Analysis

Since EPA is proposing to set NSPS equal to BAT (Option 10) and has determined that this option is economically achievable for these facilities under BAT, EPA concluded that NSPS based on Option 10 would not create a barrier to entry.

P. PSNS for the Shipbuilding Dry Dock Subcategory

1. Rationale for Not Proposing PSNS

EPA expects that new facilities in the Shipbuilding Dry Dock subcategory will discharge similar quantities of the same pollutants that existing sources discharge. Therefore, EPA is proposing to not establish PSNS for this subcategory for the same reasons that it did not propose PSES. (See Section XII.K.1)

XIV. Issues Related to the Methodology Used to Determine POTW Performance

For today's proposal, EPA used its traditional methodology to determine

POTW performance (percent removal) for toxic and non-conventional pollutants. POTW performance is a component of the pass-through methodology used to identify the pollutants to be regulated for PSES and PSNS. It is also a component of the analysis to determine net pollutant reductions (for both total pounds and toxic pound-equivalents) for various indirect discharge technology options. However, as discussed in more detail below, EPA is evaluating several issues related to its traditional methodology for determining POTW performance and solicits comments a variety of methodological changes.

A. Assessment of Acceptable POTWs

EPA developed the principal pass-through analysis for today's MP&M proposal by using data from all 50 POTWs that were part of the 50 POTW Study data base. Some of these POTWs were not operated to meet the secondary treatment requirements at 40 CFR part 133 for all portions of their wastestream. Most POTWs today have secondary treatment or better in place. EPA estimates that as of 1996, POTWs with at least secondary treatment in place service greater than 90 percent of the indirect discharging population. If the POTW removal calculations do not reflect the upgrades and system improvements that have occurred since the time of the 50 POTW Study, they would tend to under-estimate POTW removals. This would result in overestimating the pollutant reductions that are achieved through the regulation of indirect dischargers, thereby making the regulation appear more cost-effective for indirect dischargers than it is.

One partial solution to this methodological issue would be to evaluate individual treatment trains in the 50 POTW Study data base, and include only those treatment trains that achieved compliance with 40 CFR part 133 in the analysis of POTW pollutant removal rates. There were 29 treatment trains that achieved BOD₅ and TSS effluent concentrations between 15 mg/l and 45 mg/l during the sampling and could potentially be considered reflective of secondary treatment (based on 40 CFR 133.102 limitations of 30 mg/l monthly average and 45 mg/l weekly max for secondary treatment), and an additional 2 treatment trains were either trickling filters or waste stabilization ponds that achieved BOD₅ and TSS effluent concentrations between 40 mg/l and 65 mg/l and could potentially be considered equivalent to secondary treatment pursuant to 40 CFR 133.101(g) (based on 40 CFR 133.105 limitations of

45 mg/l monthly average and 65 mg/l weekly maximum). In addition, 15 treatment trains achieved BOD₅ and TSS effluent concentrations below 15 mg/l each, and could potentially be considered greater than secondary treatment.

Using data from these 46 treatment trains only would omit the worst performers in the 50 POTW Study that are probably not reflective of current performance. It might not fully correct, however, for additional upgrades and optimization that may have occurred over the past two decades.

B. Assessment of Acceptable Data

EPA developed the pass-through analysis that is the basis for today's proposal using POTW data editing criteria that are generally consistent with those used for the industry data. Specifically, EPA included only data from POTWs for which influent concentrations were 10 times the analytical minimum (quantitation) level (10xML) if available. If none of the average pollutant influent concentrations are at least 10 times the ML, then EPA retained only data from POTWs for which influent concentrations were 2 times the analytical minimum level. Because it is difficult to achieve the same pollutant reduction (in terms of percent) in a dilute wastestream as in a more concentrated wastestream, EPA believes that a 10 X ML editing criteria may overestimate the percent removals that are calculated for both industry and POTWs in the pass-through analysis.

As a general rule, more POTW data than industry data is eliminated through this editing criteria for the specific pollutants that are being examined. This is not surprising since the pass-through analysis would not even be performed on pollutants generally found at less than 10 times the method minimum level in industry since EPA would, in many cases, not require pretreatment for such low levels of a pollutant. As a result of this imbalance (pollutant influent levels at POTWs being less than pollutant influent levels to industrial pretreatment), EPA believes that it is possible that this editing criteria may bias the pass-through results by over-estimating POTW removals where influent concentrations are generally lower. This would result in underestimating the pollutant reductions that are achieved through the regulation of indirect dischargers thereby making the rule appear less cost-effective than it is. On the other hand, there may be little difference in percent removals across the range of

influent concentrations generally experienced by POTWs.

One potential solution to this methodological question would be to include data (for both indirect dischargers and POTWs) even if the influent concentration is not 10 times the analytical minimum level. This solution needs to be considered in context, however, with data handling criteria for effluent measurements of "non-detect" discussed below.

C. Assessment of Removals When Effluent Is Below the Analytical Method Minimum Level

EPA developed the pass-through analysis that is the basis for today's proposal using the analytical method minimum level as the effluent value when the pollutant was not detected in the effluent. This is the approach that is generally used when developing pollutant reduction estimates for the regulation, performing cost-effectiveness calculations, and developing effluent limitations. EPA believes that this methodology may underestimate the performance of the selected technology option for both direct and indirects. Once again, this would result in underestimating the removals estimated for direct dischargers, and thereby making the rule appear less cost-effective than it is. For indirect dischargers, EPA believes that the overall effect of using the minimum level for non-detect values for both industry and POTW data creates a bias for underestimating POTW removals in comparison to industry removals. This may result in an overestimation of pollutant removals by indirect dischargers, and may make the rule appear more cost-effective than it is. [Note that this problem is minimized by only using data with influent levels exceeding 10 X ML, because a non-detect assures that at least 90 percent of the pollutant has been removed. It is arguably less important that the true removal may be greater than 90 percent, rather than exactly 90 percent. Using a less stringent editing criteria of 2 X ML as discussed above would exacerbate this problem. If the influent were only 2 X ML, then removals greater than 50 percent could never be measured.]

One potential alternative would be to assume a value of one half of the minimum level for effluent values of non-detect. This approach would have to be applied uniformly for the indirect dischargers as well as the POTWs in order for the percent removal calculations to be reasonable.

For a more detailed discussion of alternative approaches to the POTW pass-through analysis, see the Appendix

to Section 7 of the Technical Development Document. EPA solicits comment on the significance of each of these methodological issues and the potential alternatives.

XV. Methodology for Estimating Costs and Pollutant Reductions

EPA estimated industry-wide compliance costs and pollutant loadings using model sites based on technical questionnaire respondents and a computerized design and cost model for the MP&M technology options (see Sections 11 and 12 of the Technical Development Document for a detailed discussion of EPA's MP&M Design & Cost Model). The Agency estimated industry-wide costs and pollutant loadings for several technology options based on technologies designed for each subcategory of model sites. EPA used these model sites to estimate costs for 63,000 MP&M wastewater-discharging sites nationwide using statistically calculated industry weights (*i.e.*, survey sample weights). EPA notes that once the low flow exclusion is applied, the number of sites expected to incur costs under the MP&M regulation is 10,300.

There are 890 sites which indicated that they were water dischargers on their technical questionnaire and provided EPA with enough data to include them in the cost model. EPA assessed each of the 890 sites selected to determine the unit operations, wastewater characteristics and treatment technologies currently in place at the sites.

Based on the information provided by the sites in their questionnaire responses, follow-up letters, and phone calls, EPA classified each wastewater stream by the type of unit operation (*e.g.*, machining, electroplating, acid treatment, etc.) and base metal type (*e.g.*, steel, aluminum, zinc, etc.). The Agency used the following additional questionnaire data to characterize process wastewater streams: wastewater discharge flow rate, production rate, operating schedule, and discharge destination. Many of the sites provided these data for all wastewater streams generated on site. For sites that did not provide complete data, EPA either estimated the missing data based on technical considerations specific to the site, or statistically imputed the data. The Agency modeled the concentration of each pollutant in each wastewater stream from field sampling of wastewater discharges from the unit operations at MP&M sites. EPA used questionnaire responses to identify the following information about end-of-pipe technologies in place at MP&M sites: the types of treatment units in place; the

unit operations discharging process wastewater to each treatment unit; and the operating schedule of each treatment unit.

EPA developed a computerized design and cost model to estimate compliance costs and pollutant loadings for the MP&M technology options, taking into account each site's level of treatment in place. As a conservative estimate for estimating baseline (prior to compliance with these proposed regulations) pollutant loadings, EPA assumed that all sites with treatment currently in place (including those sites not currently covered by the Metal Finishing regulations) were currently meeting the long-term average (LTA) concentrations (*i.e.*, design concentrations) for the pollutants limited under the Metal Finishing effluent guidelines (40 CFR part 433) with the exception of cyanide and were meeting the LTA concentrations achieved by EPA's sampled MP&M BAT facilities for cyanide and other pollutants of concern. For sites that did not report treatment in place, EPA based baseline pollutant loadings on EPA's unit operation-by-unit operation sampling data for raw wastewater. The Agency programmed the model with technology-specific modules which calculated the costs for various combinations of technologies included in the technology options for each subcategory. EPA based design and cost data on MP&M site data, literature data, and vendor data. The Agency developed technology-specific cost modules for the in-process pollution prevention and water use reduction technologies and end-of-pipe treatment technologies discussed in Section VII.A of this notice.

The model provided the following types of information for each technology designed for a model site: capital costs; operating and maintenance costs; electricity used and associated cost; sludge generation and associated disposal costs; waste oil generation and associated disposal costs; water use reduction and associated cost credit; chemical usage reduction and associated cost credit; effluent flow rate; and effluent pollutant concentrations. This data enabled EPA to develop site by site compliance costs and pollutant reductions for the costed sites.

If contract hauling of wastewater for off-site treatment and disposal was less costly than on-site treatment, EPA estimated costs assuming the model site would contract haul the wastewater. EPA made this assessment on a technology-specific basis. When estimating costs for sludge disposal, EPA assumed all sludge to be F006

listed (or other F-listed hazardous waste) hazardous waste under RCRA (40 CFR 261.31) and would, therefore, be disposed of off-site as hazardous waste. As a conservative estimate for the model, EPA did not allow the time for storage of the sludge prior to disposal to exceed 90 days, regardless of the facilities RCRA generator status (*i.e.*, exempt, small, large). EPA notes that on March 8, 2000 (65 FR 12377), the Agency published a final regulation in the **Federal Register** extending the accumulation time, under RCRA, for certain wastewater treatment sludges from electroplating processes to be held on-site without requiring a hazardous waste storage permit. Facilities implementing pollution prevention, recycling and metals recovery meeting certain requirements can accumulate F006 sludge for up to 180 days for large quantity generators (or 270 days for small quantity generators).

After estimation of capital and operating and maintenance costs, EPA calculated the total capital investment (TCI), and the total annualized cost (TAC). The Agency assumed that

facilities meeting local limitations or national effluent limitation guidelines and pretreatment standards will already incur monitoring costs. EPA solicits comment on the whether facilities will incur additional monitoring costs to comply with today's proposal (and how much that monitoring would cost). EPA has incorporated several options for adding additional flexibility in regards to monitoring (See Section XXI.C for a discussion on monitoring flexibility). EPA expects that these proposed flexibilities will decrease the overall burden and costs of analytical wastewater monitoring for facilities within the scope of this rule.

XVI. Economic Impact and Social Cost Analysis

A. Introduction

EPA's economic analyses are presented in the report titled *"Economic, Environmental, & Benefit Analysis of the Proposed Metal Products & Machinery Rule [EPA-821-B-00-008]* (hereafter referred to as the "EEBA"). This report presents the social costs and

benefits of the proposed rule and alternatives, and estimates the expected economic impacts of compliance with the proposed rule in terms of facility closures and associated losses in employment. Other measures of economic impact include firm-level impacts, local community impacts, international trade effects, employment effects, and effects on new MP&M facilities. An analysis of impacts on small businesses supports EPA's compliance with the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). This section of the preamble summarizes the economic impact and social cost findings from the EEBA. The reader is referred to the full report for the details of these analyses.

EPA's determination of economic achievability are based on the findings reported in the EEBA and discussed below. The options analyzed consist of combinations of comparable technology options for the different subcategories. The three options analyzed in the economic analyses are defined as follows:

TABLE XVI-1.—REGULATORY OPTIONS CONSIDERED IN THE ECONOMIC ANALYSES

Subcategory	Proposed rule	Option 2/6/10	Option 4/8
General Metals	Technology option 2; 1 mg/l flow cutoff for indirect dischargers.	Technology option 2	Technology option 4.
Metal Finishing Job Shop	Technology option 2	Technology option 2	Technology option 4.
Non-Chromium Anodizing	Technology option 2; no PSES/PSNS for indirect dischargers.	Technology option 2	Technology option 4.
Printed Wiring Board	Technology option 2	Technology option 2	Technology option 4.
Steel Forming & Finishing	Technology option 2	Technology option 2	Technology option 4.
Oily Wastes	Technology option 6; 2 mg/l flow cutoff for indirect dischargers.	Technology option 6	Technology option 8.
Railroad Line Maintenance	Technology option 10; no PSES/PSNS for indirect dischargers.	Technology option 10	Technology option 8.
Shipbuilding Dry Dock	Technology option 10; no PSES/PSNS for indirect dischargers.	Technology option 10	Technology option 8.

Technology options 1 through 10 are described in Section VIII.A. of the preamble.

Technology options 1, 3, 5, 7 and 9 (without pollution prevention) were not further analyzed, because they remove fewer pollutants and cost more than the comparable technology options with pollution prevention.

The economic impact analyses assess how facilities will be affected financially by the proposed rule. Key outputs of the facility impact analysis include expected facility closures in the MP&M industries, associated losses in employment, and the number of facilities experiencing financial stress short of closure ("moderate impacts"). The findings from the facility impact analysis also provide the basis for the following analyses:

- A firm-level analysis, which assesses the impact on the financial

performance and condition of firms owning MP&M facilities;

- An employment effects analysis, which assesses the increase in employment associated with compliance activities, the loss of employment due to facility closures, and the net effect on overall employment;

- A community impact analysis, which assesses the job losses caused by facility closures and job gains associated with compliance;

- A foreign trade analysis, which assesses the effect of the proposed rule on the U.S. balance of trade;

- A new source impact analysis, which assesses the effect of effluent guidelines on the costs and financial

viability of new facilities in the MP&M industries; and

- The Initial Regulatory Flexibility Analysis (IFRA), which assesses the economic and financial impacts of the proposed rule on small entities.

B. Facility Level Impacts

1. Facility Categories Analyzed

EPA performed economic impact analyses for three categories of facilities, using different methodologies to evaluate each of the groups. The three groups are:

- Private MP&M Facilities. This group includes privately-owned facilities that do not perform railroad line maintenance and are not owned by governments. This major category

includes private businesses in a wide range of sectors or industries, including. This segment includes facilities that manufacture and rebuild railroad equipment. Only facilities that repair railroad track and equipment along the railroad line are not included.

- Railroad line maintenance facilities maintain and repair railroad track, equipment and vehicles.
- Government-owned facilities include MP&M facilities operated by municipalities, State agencies and other public sector entities such as State universities. Many of these facilities repair, rebuild, and maintain buses, trucks, cars, utility vehicles (e.g., snow plows and street cleaners), and light machinery.

The specific methodology used to assess impacts differs for each of the three types of MP&M facilities. In each case, EPA established thresholds for measures of financial performance and compared the facilities' performance before and after compliance with each regulatory option with these thresholds.

2. Data Sources for the Facility Impact Analysis

The economic analyses rely on data provided by the financial portion of the detailed questionnaire distributed to MP&M facilities by EPA under the authority of Section 308 of the Clean Water Act ("Section 308 Survey"). (See Section V.B for information on the MP&M survey questionnaires). The survey was conducted in two phases, covering different MP&M industries in each phase. The Phase I survey covered seven industry sectors and reported data for fiscal years 1987 to 1989. The Phase II survey covered an additional ten industry sectors (all remaining MP&M sectors except Steel Forming and Finishing, which was the subject of a separate survey) and reported data for fiscal years 1994 to 1996. The survey financial data were extrapolated to 1999 dollars using the Producer Price Index. The survey financial data included three years of income statements and balance sheets for the facility; the composition of revenues by customer type and MP&M business sector; estimated value of facility assets and liabilities in liquidation; borrowing costs; ownership of the facility; and total revenues and employment of the owning entity (if separate from the facility). The impacts assessed for these sample facilities were extrapolated to the national level using facility sample weights that are based on the sample design for the industrial detailed surveys.

Data for facilities in the railroad line maintenance subcategory came from a modified version of the Phase II survey

administered to railroad operating companies. The questionnaire was modified because railroad operating companies generally do not monitor financial performance or collect financial data at the facility level for line maintenance facilities. The railroad operating companies reported the number of MP&M facilities in each operating unit, and provided detailed operating company financial data and technical data for each line maintenance facility.

Data for the Steel Forming and Finishing Subcategory came from a 1997 Section 308 survey of iron and steel facilities. This survey requested financial data generally similar to that collected by the MP&M surveys, including income statements and balance sheets for Fiscal Years 1995–1997 for the facility and the parent firm.

Government-owned MP&M facilities provided data in response to a Phase II Section 308 survey of municipal and other government agency facilities. This survey requested information on fiscal year 1996 sources and amounts of revenue and debt levels for both the government entity and the MP&M facilities; and demographic data for the population served by the government entity.

In addition to the survey data, a number of secondary sources provided data for the analysis. Secondary source data were used to characterize background economic and financial conditions in the industries subject to the MP&M effluent guideline. Secondary sources used in the analysis include:

- Department of Commerce economic census and survey data, including the Censuses of Manufactures, Annual Surveys of Manufactures, and international trade data;
- The Benchmark Input-Output Tables of the United States, published by the Bureau of Economic Analysis in the Department of Commerce;
- Price index series from the Bureau of Labor Statistics, Department of Labor;
- U.S. Industry and Trade Outlook, published by McGraw-Hill and the U.S. Department of Commerce;
- Industry trade publications; and
- Financial publications, including the Value Line Investment Survey and Robert Morris Associates annual data summaries.

3. Methodology and Impact Measures for the Facility Level Analysis

a. Private MP&M Facilities

EPA performed two categories of financial analysis, one to assess the potential for facility closures and the

other to assess the potential for moderate financial impacts on MP&M facilities. These analyses considered facility financial condition in the absence of the rule (under baseline conditions) and changes in financial condition that would result from the proposed rule.

EPA used two financial tests to estimate closures among general MP&M facilities:

- After-Tax Cash Flow: EPA examined after-tax cash flow (ATCF) over a three year period to determine the financial condition of general MP&M facilities.

- Net Present Value: EPA also performed a net present value (NPV) test, which compared the liquidation value of each facility to the present value of expected future earnings. A business may close if the value of closing (its liquidation value) exceeds its value as an ongoing business (calculated as the present value of expected future earnings).

EPA determined that a facility is subject to severe financial stress and is a potential closure if ATCF is negative, since businesses generally cannot sustain negative cash flows for long periods of time. This test used the average of reported financial data over three fiscal years. Baseline cash flow is defined as the sum of reported net income and depreciation. The measure is widely used within industry in evaluating capital investment decisions because both net income and depreciation (which is an accounting offset against income, but not an actual cash expenditure) are potentially available to finance future investment. However, assuming that total baseline cash flow is available over an extended time horizon (for example, 15 years) to finance investments related to environmental compliance could overstate a site's ability to comply. In particular, the cost of existing capital equipment (not associated with regulatory compliance) is not netted out of cash flow, as it is of income through the subtraction of depreciation. Thus, any costs associated with either replacing existing capital equipment, or repaying money that was previously borrowed to pay for it, are omitted from the facility analysis. EPA requests comment on its use of cash flow as a measure of resources available to finance environmental compliance and suggestions for alternative methodologies. (See Section XXII of today's notice.)

Where estimates of liquidation values were available, EPA also conducted the NPV test. NPV is the present value of expected future earnings less the

liquidation value (including closure and post-closure costs) of the facility. If NPV is negative, then a business owner is financially better off closing the facility and liquidating its assets, rather than keeping the facility open. EPA estimated the present value of the facility's expected future earnings by discounting its annual after-tax cash flow over a fifteen-year period using a 7 percent discount rate. EPA presumed that a facility was a potential closure if the facility had an NPV less than zero.

Where liquidation values were available, facilities that failed *both* tests under baseline conditions are baseline closures. Facilities that pass at least one of the two tests in the baseline case but then fail both tests post-compliance were considered closures due to the rule. Where liquidation values were not provided by the survey, EPA applied only the ATCF test to identify baseline and regulatory closures.

In many past rules, EPA has used only the cash flow test to predict both baseline and regulatory closures. Using

both tests presents a higher hurdle and thus makes it less likely that a facility experiencing stress will be projected to close. Due to data limitations, both tests were used for only 18,913 (approximately a third) of the 58,421 private MP&M facilities considered in the analysis. For the remaining two-thirds of the facilities, only the after-tax cash flow test was used. Table XVI-2 shows the impacts on estimated closures of using both tests, rather than the cash flow test alone, to predict closures.

TABLE XVI-2.—BASELINE CLOSURES, REGULATORY CLOSURES, AND NATIONAL ESTIMATES OF COMPLIANCE COSTS FOR PRIVATE MP&M FACILITIES BY STATUS UNDER TESTS FOR CLOSURES: 18,913 FACILITIES FOR WHICH BOTH TESTS WERE USED

Closure test	Baseline closures	Facilities remaining open in the baseline	Status under proposed option	
			Regulatory closures	Pre-tax compliance costs (\$1999 million)
Fail ATCF Only	3,211	15,766	225	\$1,782.6
Fail NPV Only	4,243	14,734	244	1,657.2
Double Test: Fail ATCF and NPV Text	2,711	16,266	169	1,793.4

If the cash test alone had been used, about 500 additional baseline closures and 56 additional regulatory closures would have been projected for the proposed rule. Depending on the subcategories in which these facilities were located, this could have affected EPA's achievability determinations in some cases. EPA requests comment on its methodology for estimating facility closures for this rule.

All sellers in an affected market may benefit from higher prices when prices rise in response to compliance costs, whether or not they incur compliance costs under the rule. Some facilities that have very low compliance costs may even gain more from increased prices than they lose due to increased costs associated with the rule. The analysis takes into account the effect of price increases that are attributable to the regulation. The estimated price increases were generally less than 1 percent and in no case exceeded 2 percent.

EPA also identified private MP&M facilities that are not expected to close but that might nonetheless experience moderate financial impacts as a result of the rule. The analysis of moderate financial impacts examined two financial indicators:

- **Pre-Tax Return on Assets (PTRA):** The ratio of cash operating income to total assets measures the facility's profitability.

- **Interest Coverage Ratio (ICR):** The ratio of cash operating income to interest expenses measures the facility's ability to service its debt and borrow for capital investments.

These two measures are among the criteria that creditors and equity investors use to determine whether and under what terms to provide financing to a business. The PTRA and ICR also provide insight into the ability of a business to generate funds for compliance investments internally. A business may have some trouble obtaining financing if its profitability is low and its ability to pay its continuing interest expenses is uncertain. EPA compared baseline and post-compliance PTRA to an 8 percent threshold and ICR to a threshold of 4. A facility is considered subject to incremental moderate impacts attributable to the proposed regulation if its PTRA and its ICR both pass these thresholds in the baseline but it fails one or both of the tests after compliance with the rule. Facilities failing one of the tests in the baseline and both tests post-compliance were not counted as experiencing moderate impacts, but this may in some cases be indicative of moderate rule-related impacts as well.

EPA assumed that MP&M facilities would be able to recover some of their regulatory costs by raising prices to their customers. An analysis of the potential for cost recovery considered conditions in each individual MP&M industrial

sector industry (e.g. aircraft, aerospace, electronic equipment, etc.) Cost pass-through factors were estimated for each sector. The cost pass-through factor blends findings from two separate analyses to estimate a composite measure of pass-through potential:

- An econometric analysis of the historical relationship between output prices and changes in input costs; and

- An analysis of indicators of pass-through potential based on market structure and performance.

Market structure factors include:

- Market power based on the degree of horizontal and vertical integration;

- Extent of competition from foreign suppliers (in both domestic and export markets);

- Barriers to competition as indicated by above normal, risk-adjusted profitability; and

- Long term growth trends in the industry.

The analysis of pass-through potential indicates the percentage of compliance costs that EPA expects firms subject to regulation to recover from customers through increased prices. The estimated percentage price increases were very small for the proposed rule, ranging from 0.02 percent to less than two percent in different sectors. This analysis can be found in Appendix B of the EEBA.

Table XVI-3 summarizes the measures used to assess impacts for private MP&M facilities.

TABLE XVI-3.—SUMMARY OF FACILITY IMPACT METHODOLOGY FOR PRIVATE MP&M FACILITIES

Impact category	Description	Criteria	Significance of negative finding
Baseline Closure	Identifies facilities that are in jeopardy of financial failure independent of the proposed regulation.	1. After-tax cash flow (ATCF) negative? and 2. Liquidation value exceed going concern value (NPV test)?	Facilities failing both tests are considered baseline closures and excluded from subsequent analyses.
Post-Compliance Closure	Identifies facilities that are likely to close instead of implementing the pollution prevention and treatment systems required to comply with the rule.	1. Post-compliance after-tax cash flow (ATCF) negative? and 2. Liquidation value exceed post-compliance going concern value?	Facilities failing both tests are projected to close as the result of regulation—an incremental severe economic impact.
Moderate Financial Impacts	Identifies facilities that may have difficult financing compliance investments or on-going business investments as a result of the rule.	1. Decline in pre-tax return on assets (PTRA) to a level that jeopardizes access to financing? or 2. Decline in interest coverage ratio (ICR) to a level that jeopardizes access to financing?	Facilities passing both tests in the baseline but failing one or both tests post-compliance are considered to experience incremental moderate economic impacts attributable to the regulation.

b. Railroad Line Maintenance Facilities

Railroad operators are unlikely to evaluate the financial performance of repair and maintenance facilities as separate profit centers, and are therefore not likely to estimate revenues at the facility level. EPA conducted an analysis of impacts of these facilities at the railroad operating company level, and assessed whether the combined impact of compliance costs for the regulated facilities owned by each operating company would cause a deterioration in the company's financial performance. The analysis predicted that railroad line maintenance facilities would close only if the railroad operating company as a whole was predicted to close, based on the same closure tests described above for other private MP&M facilities. Railroad facilities other than the line maintenance facilities perform the same type of operations as other MP&M facilities and are included in the General Metals and Oily Wastes subcategories, depending on their MP&M activities.

c. Government-Owned Facilities

Governments with facilities affected by the proposed rule may take one of three actions in response to the rule:

- Replace one or more MP&M municipal facilities with a non-municipal provider for services;
- Discontinue these services altogether; or
- Pay for compliance and continue operations.

EPA assumed that all government-owned facilities would continue operating under the proposed rule. The economic impact analysis for these facilities evaluates whether a government entity would incur a major budgetary burden as a result of complying with the proposed rule. Like

private firms, governments could in some cases minimize the impact of the proposed rule on their budgets by discontinuing operations at the regulated facility, rather than paying the costs of compliance. Unlike the analysis for private sector MP&M facilities, the analysis of government impacts did not consider potential closures and therefore may overstate the impacts of the rule on governments that own MP&M facilities.

EPA evaluated impacts for government-owned facilities by performing three tests.

- Impacts on site-level cost of service:

This test assesses whether facility compliance costs would exceed one or more percent of the total baseline cost of service at that facility. EPA assumed that facilities can absorb compliance costs within their current budget if the costs do not exceed one percent of total costs in the baseline.

- Impacts on taxpayers: This test compared compliance costs to the income of households that are served by the relevant government, and that may support the government through taxes and fees. (If the government is a regional transit authority, for example, then the households included in this analysis are all households in the region that provides funding for the transit authority, as reported in the Phase II Section 308 survey.) A government might be expected to experience impacts if the ratio of total annualized pollution control costs per household to median household income exceeds one percent post-compliance. This comparison considered the government entity's existing pollution control costs plus the compliance costs incurred by all of its MP&M facilities under this rule. EPA uses this test in its Economic Guidance for Water Quality Standards as a screening measure to determine

when communities would incur "little economic impact" from total pollution control costs. EPA recognizes that most local governments receive at most a few percent of the income of their tax or fee base (and some receive much less). Thus, one percent of median income for pollution control costs alone may be a very significant share of the local government's total budget.

- Impact on government debt levels: This test assessed the impact of financing the capital costs of compliance on the government's overall debt burden. The government might be expected to experience impacts if financing all of the compliance capital investments would increase its total debt service payments to more than 25 percent of baseline revenue. This criterion is used in EPA's MUNIPAY model as a level beyond which debt service costs might adversely affect a community's credit-worthiness. EPA determined that a government facility that failed all three tests is likely to suffer severe adverse impacts as a result of the rule. As shown in Table XVI-12 below, no governments fail the latter two tests. However, 215 facilities failed the site-level cost of service test. The governments operating these facilities could experience some level of impacts as a result of the rule, if these facilities represent a significant cost to their budgets. Government owned facilities perform the same type of operations as other MP&M facilities and are included in the General Metals and Oily Wastes subcategories, depending on their MP&M activities.

4. Baseline Closure Analysis

The estimated baseline closures for both indirect and direct discharge facilities are summarized in Table XVI-4. Of the estimated 62,752 discharging facilities, 6.1 percent or 3,829 facilities

were assessed as baseline closures. The 3,829 baseline closures include 3,678 indirect dischargers, or 6.3 percent of indirect dischargers, and 151 direct dischargers, or 3.1 percent of direct dischargers. The facilities estimated to close in the baseline analysis are in

jeopardy of financial failure independent of the proposed rule. These facilities were excluded from the post-compliance analysis of regulatory impacts. Data on facility start-ups and closures from the Census Statistics of U.S. Businesses indicate that between 6

and 12 percent of facilities in the major metal products manufacturing industries close in any given year. EPA's estimate may therefore understate actual baseline closures somewhat.

TABLE XVI-4.—SUMMARY OF BASELINE CLOSURES

Subcategory	Total number of dischargers	Number of baseline closures	Percent of baseline closures	Operating in baseline
General Metals	29,975	3,199	10.7	* 26,776
Metal Finishing Job Shop	1,530	286	18.7	1,244
Non-Chromium Anodizing	190	40	21.1	150
Printed Wiring Board	635	3	0.5	632
Steel Forming & Finishing	153	6	3.9	147
Oily Wastes	29,425	295	1.0	29,130
Railroad Line Maintenance	832	0	0.0	832
Shipbuilding Dry Dock	11	0	0.0	11
All Categories	62,752	3,829	6.1	* 58,922

* Excludes 64 facilities that close under baseline conditions but that are expected to continue operating under the proposed rule.

Note: may not sum to totals due to independent rounding.

Of the facilities closing in the baseline, 64 are projected to continue operating under the proposed rule because they qualify for the low flow cutoff (and therefore incur no compliance costs) but benefit from price increases caused by the rule. These 64 facilities are not considered in the remainder of the economic impact analysis.

5. Facility Level Costs by Subcategory

The Technical Development Document presents EPA's engineering estimates of costs that will be incurred by facilities to comply with the proposed rule and other regulatory options. EPA adjusted the engineering costs from 1996 to 1999 dollars using the *Engineering News-Record* Construction Cost Index (CCI), and adjusted the costs to reflect the effect of taxes using the maximum Federal income tax rate of 34 percent. The annual equivalent of capital and other

one-time costs is calculated by annualizing costs at a seven percent discount rate over an estimated 15 year equipment life.

The compliance costs of the rule are the costs paid by those facilities that continue to operate in compliance with the rule. Aggregate compliance costs presented in this section differ from the costs presented in Section IX because they exclude costs for facilities that are baseline closures or that close due to regulatory requirements. They therefore represent only the compliance outlays of facilities that continue to operate. Section H presents EPA's estimates of social costs, which include costs for regulatory closures. Table XVI-5 shows the total annualized compliance costs by subcategory for the 9,577 dischargers (direct and indirect) that are subject to requirements, make the necessary investments to meet the requirements, and continue operating under the proposed rule. The table also presents

costs for Option 2/6/10 and Option 4/8, but results are discussed for only the proposed option to reduce the length of this document.

Total annualized costs are the sum of the annual operating and maintenance costs and the annualized equivalent of capital and other one-time costs. Annualized after-tax compliance costs are estimated to be \$1,328.9 million (\$1.33 billion)³ per year under the proposed rule, of which 13 percent is paid by direct dischargers and 87 percent is paid by indirect dischargers. A total of 49,147 indirect dischargers are excluded from regulation by the proposed exclusions and low flow cutoffs. Total compliance costs would be 36 percent higher under Option 2/6/10 (\$1,812 million per year paid by 57,641 facilities) and 120 percent higher under Option 4/8 (\$2,918 million per year paid by 55,959 facilities) than under the proposed rule.

TABLE XVI-5.—TOTAL ANNUALIZED FACILITY * COMPLIANCE COSTS BY SUBCATEGORY, DISCHARGE STATUS AND REGULATORY OPTION
[After-tax, million \$1999]

Subcategory	Proposed rule		Option 2/6/10		Option 4/8	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
General Metals	\$132.3	\$969.9	\$132.3	\$1,295.8	\$195.1	\$1,885.5
Metal Finishing Job Shop	0.8	80.1	0.8	80.1	1.5	112.1
Non-Chromium Anodizing .....	.....	0.0	.....	17.5	.....	26.0
Printed Wiring Board	1.7	93.4	1.7	93.4	3.0	141.2
Steel Forming & Finishing	20.9	14.0	20.9	14.0	22.7	21.8
Oily Wastes	9.3	4.3	9.3	143.8	50.0	457.4
Railroad Line Maintenance	0.8	0.0	0.8	0.2	0.9	0.4

³ EPA notes that pre-tax annualized compliance costs are estimated to be \$1.98 billion (in 1999 dollars).

TABLE XVI-5.—TOTAL ANNUALIZED FACILITY * COMPLIANCE COSTS BY SUBCATEGORY, DISCHARGE STATUS AND REGULATORY OPTION—Continued
[After-tax, million \$1999]

Subcategory	Proposed rule		Option 2/6/10		Option 4/8	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
Shipbuilding Dry Dock	1.4	0.0	1.4	0.1	0.4	0.1
All Categories: Annual Costs	167.2	1,161.7	167.2	1,644.9	273.6	2,644.5
All Categories: Number of Regulated Facilities Continuing to Operate Post-Regulation	4,633	4,944	4,633	53,008	4,615	51,344
Total Costs to Industry by Option, Directs + Indirects	\$1,328.9		\$1,812.1		\$2,918.1	

* This table includes facility compliance costs only. Section XVI.H. discusses the social costs of the rule. The estimates in this table exclude baseline and regulatory closures.

Note: May not sum to totals due to independent rounding.

6. Facility Level Impacts by Subcategory

The findings from the post-compliance impact analyses are summarized below, first for the PSES requirements considered for indirect discharging facilities, and then for the BAT/BPT options considered for direct discharging facilities. A third section summarizes the findings for both discharger classes. Impacts are discussed for only the proposed option, to reduce the length of the document; however, the tables present the results for Option 2/6/10 and Option 4/8. Impacts are not presented for Options 1, 3, 5, 7, and 9 (without pollution prevention) because these options remove fewer pollutants and cost more than the comparable Options 2, 4, 6, 8, and 10.

a. Indirect Dischargers

Of the 54,270 indirect discharging facilities subject to regulation after baseline closures, EPA estimates that 179 facilities or 0.3 percent could be expected to close as the result of the proposed rule, as shown in Table XVI-6. More than 90 percent of the indirect dischargers are excluded from the regulation by the low-flow cutoffs for the General Metals and Oily Wastes subcategories, and the exclusions for Non-Chromium Anodizers, Railroad Line Maintenance and Shipbuilding Dry Docks. The employment losses associated with the facility closures are estimated at 5,738 full-time equivalent (FTE) positions. The estimated losses in employment are probably substantial overestimates because the analysis does

not account for the likelihood that non-closing facilities will absorb some of the employment lost from closing facilities. The proposed rule also creates new employment demand to build, install, maintain and operate compliance equipment, which offset these job losses. These job gains are discussed in Section XVI-H.4.

Another 575 facilities, or one percent of the indirect dischargers operating in the baseline, are expected to experience moderate economic impacts under the proposed rule, as shown in Table XVI-7. Both closures and moderate impacts increase substantially for Option 2/6/10 and Option 4/8, compared to the proposed rule.

TABLE XVI-6.—INCREMENTAL SEVERE IMPACTS (FACILITY CLOSURES) ON INDIRECT DISCHARGERS

Subcategory	Total operating in baseline	Number of facility closures due to the rule		
		Proposed rule	Option 2/6/10	Option 4/8
General Metals	23,140	24	1,017	2,140
Metal Finishing Job Shops	1,231	128	128	393
Non-Chromium Anodizing	150	0	91	91
Printed Wiring Board	620	7	7	25
Steel Forming & Finishing	105	6	6	6
Oily Wastes	28,219	14	14	271
Railroad Line Maintenance	799	0	0	0
Shipbuilding Dry Dock	6	0	0	0
All Categories	54,270	179	1,262	2,925

Note: May not sum to totals due to independent rounding.

TABLE XVI-7.—INCREMENTAL MODERATE IMPACTS ON INDIRECT DISCHARGERS

Subcategory	Total operating in baseline	Number of facilities experiencing moderate impacts due to the rule		
		Proposed rule	Option 2/6/10	Option 4/8
General Metals	23,140	153	1,753	1,737
Metal Finishing Job Shops	1,231	117	117	117
Non-Chromium Anodizing	150	0	0	0
Printed Wiring Board	620	301	301	315
Steel Forming & Finishing	105	4	4	4
Oily Wastes	28,219	0	0	26
Railroad Line Maintenance	799	0	0	0
Shipbuilding Dry Dock	6	0	0	0

TABLE XVI-7.—INCREMENTAL MODERATE IMPACTS ON INDIRECT DISCHARGERS—Continued

Subcategory	Total operating in baseline	Number of facilities experiencing moderate impacts due to the rule		
		Proposed rule	Option 2/6/10	Option 4/8
All Categories	54,270	575	2,175	2,199

Note: May not sum to totals due to independent rounding.

Another 575 facilities, or one percent of the indirect dischargers operating in the baseline, are expected to experience moderate economic impacts under the proposed rule, as shown in Table XVI-7. Both closures and moderate impacts increase substantially for Option 2/6/10 and Option 4/8, compared to the proposed rule.

b. Direct Dischargers

Of the 4,653 direct discharging facilities subject to regulation after

baseline closures, EPA estimates that 20 facilities or 0.4 percent could be expected to close as the result of the proposed rule. These 20 are all General Metals facilities, and represent 0.6 percent of the 3,636 General Metals Direct Dischargers operating in the baseline. The employment losses associated with these facility closures are estimated at 178 FTEs. Again, estimated losses in employment associated with closures are likely to be overstated, because the analysis does

not account for the likelihood that non-closing facilities will absorb some of the employment from closing facilities. In addition, compliance requirements at facilities that continue to operate will lead to off-setting increases in employment.

Another 41 facilities, or 0.9 percent of the 4,653 direct dischargers operating in the baseline, would be expected to experience moderate financial impacts due to the rule, as shown in Table XVI-9.

TABLE XVI-8.—INCREMENTAL SEVERE IMPACTS (FACILITY CLOSURES) ON DIRECT DISCHARGERS

Subcategory	Total in baseline operating	Number of facility closures due to the rule		
		Proposed rule	Option 2/6/10	Option 4/8
General Metals	3,636	20	20	35
Metal Finishing Job Shops	12	0	0	0
Non-Chromium Anodizing* .....	.....	.....	.....	.....
Printed Wiring Board	11	0	0	0
Steel Forming & Finishing	43	0	0	2
Oily Wastes	911	0	0	0
Railroad Line Maintenance	34	0	0	0
Shipbuilding Dry Dock	6	0	0	0
All Categories	4,653	20	20	37

* EPA estimates that there are no facilities in the Non-Chromium Anodizing subcategory that discharge directly to surface waters.

Note: May not sum to totals due to independent rounding.

TABLE XVI-9.—INCREMENTAL MODERATE IMPACTS ON DIRECT DISCHARGERS

Subcategory	Total operating in the baseline	Number of facilities experiencing moderate impacts due to the rule		
		Proposed rule	Option 2/6/10	Option 4/8
General Metals	3,636	34	34	103
Metal Finishing Job Shops	12	0	0	0
Non-Chromium Anodizing* .....	.....	.....	.....	.....
Printed Wiring Board	11	0	0	0
Steel Forming & Finishing	43	7	7	7
Oily Wastes	911	0	0	0
Railroad Line Maintenance	34	0	0	0
Shipbuilding Dry Dock	6	0	0	0
All Categories	4,653	41	41	110

* EPA estimates that there are no facilities in the Non-Chromium Anodizing subcategory that discharge directly to surface waters.

Note: May not sum to totals due to independent rounding.

c. Summary of Facility Impacts

Table XVI-10 summarizes the results of the economic impact analysis for all facilities and for all regulatory options analyzed. Closures and moderate impacts under the proposed option are

substantially lower than in Option 2/6/10 and Option 4/8. Of the 616 facilities experiencing moderate impacts due to the proposed rule, 137 facilities fell below the threshold for pre-tax return on assets only, 38 fell below the interest coverage ratio threshold only, and 441

fell below both thresholds due to the rule. Job losses due to closures are more than off-set by job gains associated with compliance requirements under the proposed option. (See Section XVI-H.4 for a discussion of employment impacts.)

TABLE XVI-10.—SUMMARY OF INCREMENTAL FACILITY IMPACTS FOR ALL FACILITIES

Subcategory	Regulatory option		
	Proposed rule	Option 2/6/10	Option 4/8
Number of Facilities Operating in Baseline	58,922	58,922	58,922.
Number of Closures (severe impacts)	199	1,282	2,963.
Percent Closing	0.3	2.2	5.0.
Job losses due to closures (FTE-years)	5,916 (over 3 years)	16,834 (over 3 years)	48,070 (over 3 years).
Job gains due to compliance requirements (FTE-years).	8,487 (over 15 years)	12,023 (over 15 years)	27,535 (over 15 years).
Number of Additional Facilities with Moderate Impacts.	616	2,216	2,309.
Percent with Moderate Impacts	1.0	3.8	3.9.
Annualized Compliance Costs (pre-tax, billion \$1999).	\$1.98	\$2.67	\$4.18.
Annualized Compliance Costs (after-tax, billion \$1999).	\$1.33	\$1.81	\$2.92.

C. Firm Level Impacts

EPA examined the impacts of the proposed rule on firms that own MP&M facilities, as well as on the financial condition of the facilities themselves. A firm that owns multiple MP&M facilities could experience adverse financial impacts at the firm level if its facilities are among those that incur significant impacts at the facility level. The firm-level analysis is also used to compare impacts on small versus large firms, as required by the Regulatory Flexibility Act and the Small Business Regulatory Enforcement Fairness Act. (RFA/SBREFA issues are discussed in Section XX.C of this preamble.)

EPA compared compliance costs with revenue at the firm level as a measure of the relative burden of compliance

costs. EPA applied this analysis only to MP&M facilities owned by private entities. (Section XVI.D discusses impacts on governments that own MP&M facilities). The Phase I, Phase II industrial detailed, and Iron & Steel surveys identified the parent firm that owns each facility that responded to the survey. In addition, the Phase II industrial detailed survey requested that respondents provide information on other MP&M facilities owned by the same firm, on a voluntary basis. EPA estimated firm-level compliance costs by summing costs for all facilities owned by the same firm that responded to the survey plus estimated compliance costs for additional facilities for which respondents submitted information.

The Agency was not able to estimate the national numbers of firms that own

MP&M facilities precisely, because the sample weights based on the survey design represent numbers of facilities rather than firms. Most MP&M facilities (43,118 of 54,590, or 80 percent) are single-facility firms, however. These firms can be analyzed using the survey weights. In addition, there are 289 firms that own more than one sample facility. These firms are included in the analysis with a sample weight of one, since it is not known how many firms these 289 sample firms represent. EPA's analysis of firm-level impacts is presented in Chapter 9 of the EEBA.

Table XVI-11 shows the results of the firm-level analysis. The results represent a total of 43,407 MP&M firms (43,118 + 289), owning 54,590 facilities (43,118 owned by single-facility firms + 11,473 owned by multi-facility firms).

TABLE XVI-11.—FIRM LEVEL BEFORE-TAX ANNUAL COMPLIANCE COSTS AS A PERCENT OF ANNUAL REVENUES FOR PRIVATE SMALL BUSINESSES: PROPOSED RULE

Number of firms in the analysis*	Number and percent with before-tax annual compliance costs/annual revenues equal to:					
	Less than 1%		1-3%		Over 3%	
	Number	Percent	Number	Percent	Number	Percent
43,407	41,236	95	1,070	2.5	1,101	2.5

*Firms whose only MP&M facilities close in the baseline are excluded.

A small percentage (2.5 percent) of the firms in the analysis incur before-tax compliance costs equal to 3 percent or more of annual revenues. Ninety-five percent incur compliance costs less than 1 percent of annual revenues, and the remaining 2.5 percent incur costs between 1 and 3 percent of revenues. Of 2,171 firms in the analysis that incur costs greater than 1 percent of revenues, 636 are single-facility small firms that were reported in the facility impact analysis to close (161 firms) or

experience moderate impacts (475 firms) due to the rule.

This analysis is likely to overstate costs at the firm level for two reasons. First, it includes compliance costs for facilities that are projected to close due to the rule. The estimated compliance costs for these facilities are higher than the true cost to the firm of shutting down the facility, as illustrated by the detailed facility impact analysis that projects closures. Second, the analysis does not take account of actions a multi-facility firm might take to reduce its

compliance costs under the proposed rule. These include transferring functions among facilities to consolidate wet processes and take advantage of scale economies in wastewater treatment.

D. Impacts on Governments

The proposed MP&M rule will affect governments in two ways:

- Government-owned MP&M facilities may be directly affected by the MP&M regulation and therefore incur compliance costs; and

• Municipalities that own Publically Owned Treatment Works (POTWs) that receive influent from MP&M facilities subject to the regulation may incur additional costs to implement the proposed rule. These include costs associated with permitting MP&M facilities that have not been previously permitted, and with repermitting some MP&M facilities with existing control mechanisms (e.g., permits) earlier than would otherwise be required. In addition, POTWs may elect to issue mass-based control mechanisms to some MP&M facilities that currently have concentration-based control mechanisms, at an additional cost.

1. Impacts on Government-Owned Facilities

EPA administered a survey (the "Municipal Survey") to government-

owned facilities to assess the cost of the regulation on these facilities and the government entities that own them. (See Section V.B for a discussion of EPA's data collection efforts.) The survey requested information that provides the basis for EPA's analysis of the budgetary impacts of the proposed regulation, including the size and income of the populations served by the affected government entities; the government's current revenues by source, taxable property, debt, pollution control spending and bond rating; and the costs, funding sources and other characteristics of the MP&M facilities owned by each government entity.

EPA discusses the methodology for assessing impacts on government-owned facilities in more detail in Section XVI.B.3.c. In summary, EPA used three tests to assess whether

MP&M facility compliance costs would impose major budgetary impacts on the governments that own the facilities: impacts on site-level cost of service, impacts on taxpayers, and impacts on government debt. The first test assesses impacts at the facility level and the second two tests assess impacts at the government level. The Agency judged that a government would incur major budgetary impacts due to the rule if it failed all three tests.

The two government-level tests are applied incrementally. Governments that fail the test in the baseline are not considered to experience budgetary impacts attributable to the rule.

Table XVI-12 provides national estimates of the number of MP&M facilities operated by governments that are potentially subject to the proposed rule, by type and size of government.

TABLE XVI-12.—NUMBER OF GOVERNMENT-OWNED FACILITIES BY TYPE AND SIZE OF GOVERNMENT ENTITY

Size of government and status under proposed option	Municipal government	State government	County government	Regional governmental authority	Total
Large Governments (population > 50,000)	572	366	686	36	1,660
Small Governments (population <=50,000)	2,191	.....	481	.....	2,672
All Governments	2,763	366	1,167	36	4,332

Table XVI-13 summarizes the status of government-owned facilities under

the various regulatory options, their compliance costs and measures of

impacts on government that own MP&M facilities.

TABLE XVI-13.—NUMBER OF REGULATED GOVERNMENT-OWNED FACILITIES, COMPLIANCE COSTS AND BUDGETARY IMPACTS BY REGULATORY OPTION

	Proposed option	Option 2/6/10	Option 4/8
Total Number of Government-Owned Facilities	4,332	4,332	4,332
Number of facilities exempted by low-flow cutoff	3,603	.....	.....
Number of facilities subject to regulation	729	4,332	4,332
Compliance costs (\$1999 million)	\$14.1	\$64.8	\$224.7
Number of facilities with compliance costs > one percent of baseline cost of service*	215		
Number of governments failing the "impact on taxpayers" criterion**	0		
Number of governments failing the "impacts on government debt" criterion***	0		
Number of governments failing all three impacts criteria +	0		

* Annualized compliance costs as a percent of total facility costs and expenditures, including operating, overhead and debt service costs and expenses.

** Based on comparison of compliance costs for all facilities owned by the government to the income of households that are served by the relevant government. A government is judged to experience impacts if the proposed rule results in a ratio of total annualized pollution control costs per household to median household income that exceeds one percent post-compliance. Includes existing pollution control costs plus the compliance costs due to the MP&M rule.

*** Based on comparison of total debt service costs (including costs to finance MP&M capital costs entirely with debt) with baseline government revenue. A government is judged to experience impacts if the rule causes its total debt service payments to exceed 25% of baseline revenue.

+ A government is judged to experience major budgetary impacts if it has one or more facilities with costs of compliance above 1% of baseline cost of service and fails both the taxpayers impact and government debt impact tests.

Table XVI-13 shows that the proposed rule substantially reduces costs and impacts relative to the other options considered for government-owned facilities, because 3,603 (83 percent) of the facilities are exempted under the low flow cutoffs (110 General

Metals facilities and 3,492 Oily Wastes facilities.) Compliance costs would be more than 4½ times higher under Option 2/6/10 and 16 times higher under Option 4.

An estimated 215 government-owned facilities (5 percent of the total) would

incur costs under the proposed rule exceeding one percent of their baseline cost of service. Therefore, 95 percent of the government-owned facilities either incur no costs or are likely to be able to absorb the added costs within their existing budgets. None of the

governments incur costs that cause them to exceed the thresholds for impacts on taxpayers or for government debt burden. EPA therefore concludes that the proposed rule will not impose major budgetary burdens on any of the governments that own MP&M facilities.

2. POTW Administrative Costs

EPA also evaluated the costs incurred by governments to administer the rule. The rule is not expected to impose any new administrative costs associated with direct dischargers, which are already permitted by States. However, control authorities will have to issue control mechanisms (e.g., permits) for the first time to some indirect discharging facilities and will have to accelerate repermitting for some indirect dischargers that currently hold control mechanisms.

The costs of issuing and enforcing permits and control mechanisms associated with the proposed rule are discussed in Section XVI.H.3 of this preamble. EPA is able to estimate total costs to POTWs, but is not able to estimate the costs to any one POTW, since it is not possible to determine what POTWs receive discharges from MP&M facilities except for those that responded to the surveys.

EPA estimates that POTWs as a whole will incur incremental average annualized costs over 15 years of between \$115,000 and \$912,000 under the proposed rule. The maximum expenditures by all affected POTWs in any one year will be between \$186,000 and \$1,607,000. These costs include issuing new control mechanisms (e.g., permits) to facilities that do not currently have permits, issuing mass-based permits to some facilities that currently have concentration-based permits, and repermitting some facilities sooner than would otherwise be required to meet the three-year compliance schedule. On average, a POTW's costs for the incremental permitting are only \$23 to \$184 per permitted MP&M indirect discharger under the proposed rule.

EPA is requiring mass-based permits/control mechanisms only for the Steel Forming & Finishing subcategory; permits/control mechanisms for other subcategories may be concentration-based. EPA is encouraging permit writers and control authorities to issue mass-based permits and control mechanisms, however, where appropriate and feasible. The analysis of permitting costs assumes for costing purposes that one-third of the new or reissued permits/control mechanisms in subcategories other than Steel Forming & Finishing will be mass-based.

EPA expects that these increases in costs will be partially offset by reductions in government administrative costs for facilities that are already permitted under local limits and that will be repermited under this rule. The proposed technical guidance provided by EPA as a part of this rulemaking may reduce the research required by permit writers/control authorities in developing permits and control mechanisms based on Best Professional Judgement (BPJ) for industrial dischargers not previously covered by a categorical standard or a water quality standard. Further, the establishment of discharge standards may reduce the frequency of evidentiary hearings. The promulgation of limitations may also enable EPA and the authorized States to cover more facilities under general permits. EPA did not estimate these cost savings to permitting authorities that may result from the rule.

E. Community Level Impacts

EPA considered the potential impacts of changes in employment due to the proposed rule on the communities where MP&M facilities are located. Changes in employment due to the rule include both job losses that occur when facilities close and job gains associated with facilities' compliance activities. EPA estimated that a total of 5,916 jobs would be lost at the 199 facilities projected to close under the proposed rule. At the same time, EPA estimated that manufacturing and installing compliance equipment would lead to 4,488 full-time equivalent (FTE) positions, and that operating and maintaining compliance systems would result in another 286 FTEs per year. Over a 15 year analysis period, the net effect of job gains and losses caused by the rule is an increase of 2,575 FTE-years or an average of 172 FTEs per year. This estimate assumes that workers that lose their job are unemployed for an average of one year, and that compliance investments and closures occur evenly over the first three years after promulgation. This estimate of employment impacts is likely to understate the net increase, because it ignores the fact that some production and employment lost at closing plants is likely to result in increased production and employment at other MP&M facilities. (EPA's analysis of employment impacts is discussed in more detail in Section XVI-H.4 below and in Chapter 6 of the EEBA.)

Given the projected overall increase in employment due to the proposed rule, EPA does not expect the rule to have significant impacts at the

community level. It is not possible to predict precisely where the job gains and losses will occur. However, facilities that are projected to close due to the rule have employment ranging from 2 to 205 FTEs. MP&M facilities tend to be located in industrialized urban areas, and closures of this size are not likely to have a major impact on a local economy.

F. Foreign Trade Impacts

U.S. MP&M producers as a group exported products with a value of \$380.3 billion in 1999. Imports to the U.S. of the same products in 1999 totaled \$539.1 billion, resulting in an overall net MP&M commodity trade deficit of \$153.8 billion. Some MP&M sectors contribute to a positive commodity trade balance (e.g. aircraft, with a \$37.0 billion positive balance in 1999). In other sectors, substantially more products are imported than exported (e.g. motor vehicles, with a net negative balance of \$96.8 billion.) Exports and imports by MP&M sector are discussed in Chapter 3 of the EEBA.

The proposed rule will have an impact on the balance of trade in MP&M products to the extent that prices for MP&M products increase and MP&M facilities reduce production. Imports may increase if domestic customers switch from domestic suppliers to foreign suppliers of MP&M products, and exports may decrease if foreign customers switch from purchasing U.S. exports to other suppliers. On the other hand, business lost by the regulated MP&M facilities due to their increased costs may be captured by other domestic producers.

Section XVI.B of this preamble and Chapter 5 of the EEBA describe EPA's analysis of changes in output that are expected to result from the proposed rule. EPA assessed the impact of these market-level changes on the U.S. balance of trade using information provided by the industrial general surveys on the source of competition in domestic and foreign markets. This analysis allocates the value of changes in output for each facility that is projected to close due to the rule to exports, imports or domestic sales, based on the predominant source of competition in each market reported in the surveys.

Table XVI-14 shows the results of this analysis. The table compares the projected changes in exports, imports and balance of trade (expressed in \$1999) to baseline 1999 values for both the MP&M industries and for the U.S. balance of trade in commodities as a whole. The projected changes in trade under the proposed rule have a very

small impact on the balance of trade.
The total U.S. balance of trade in

commodities would decline by less than
0.01 percent and the balance of trade in

the MP&M industries would decline by
0.01 percent.

TABLE XVI-14.—PROPOSED RULE IMPACTS ON FOREIGN TRADE
[Million \$1999]

	1999 value of exports	1999 value of imports	Balance of Trade
Baseline			
U.S. Commodity Trade	695,797	1,024,618	(328,821)
MP&M Industries	380,305	534,141	(153,836)
Post-Compliance			
Change Due to the Proposed Rule	0	21.1	(21.1)
Percent Change In U.S. Commodity Trade Balance	0%	<0.01%	<0.01%
Percent Change in MP&M Industries Trade Balance	0%	<0.01%	0.01%

Source: U.S. Census and U.S. Environmental Protection Agency.

G. Impacts on New Facilities

EPA assessed the impacts of the proposed rule on new facilities based on the characteristics of a model facility in each subcategory and (in some cases) discharge category (direct and indirect). Engineering estimates of compliance costs for Option 2/6/10 and Option 4/8 for a representative facility reflect the typical flow size and other technical characteristics of facilities in each category. (See the Technical Development Document.) Table XVI-15 lists the compliance costs and flow size for a representative model facility in each category, along with the regulatory option considered for each subcategory.

In absence of the MP&M rule, new sources in the Metal Finishing Job Shop and Printed Wiring Board subcategories would comply with 40 CFR part 433 new source requirements, and Steel Forming & Finishing new sources would

comply with 40 CFR part 420 new source requirements. Therefore, the analysis considers only the incremental costs of proposed MP&M new source requirements beyond those baseline requirements.

EPA estimated facility revenues for the model facilities based on the revenues reported for existing facilities in the Section 308 surveys. The analysis excludes facilities that are projected to close or to experience moderate economic impacts in the baseline, since the economic characteristics of these financially-weak facilities are unlikely to be representative of new facilities. EPA sorted the existing financially-sound facilities in each subcategory/discharge status by flow size, and identified facilities in each quartile based on flow size. The Agency then identified the flow size quartile that the hypothetical facility would fall into. Finally, EPA calculated the average

revenue for the existing facilities in that same flow size quartile, and assumed that the hypothetical new facility would have revenues equal to that average. Table XVI-15 shows the facility revenue estimated for each model facility.

EPA calculated compliance costs as a percentage of post-compliance revenues as a measure of impacts. The projected revenues include estimated prices increases due to the rule. The analysis assumes that new sources would benefit from the small price increases resulting from the proposed rule for existing sources, and applies the same percentage price increase to calculate post-regulation revenues for the new sources. Table XVI-15 shows before-tax annual compliance costs as a percent of facility post-regulation revenues.

Finally, Table XVI-15 presents the cost-to-revenue percentage estimated for new facilities in each subcategory.

TABLE XVI-15.—NEW SOURCE IMPACTS

Subcategory	Discharge status	Existing source options proposed	New source options considered ^a	Annualized compliance costs ^b (\$1999)	Facility Revenue ^c (\$1999)	New Source ACC as % of Revenue
General Metals	I	2	4	\$393,220	\$417,071,318	0.09
General Metals	D	2	4	167,342	398,818,659	0.04
Metal Finishing Job Shops	I	2	4	65,369	1,428,443	4.64
Metal Finishing Job Shops	D	2	4	70,735	5,089,823	1.41
Non-Chromium Anodizing	I	2	4	97,108	24,201,166	0.40
Oily Wastes	I	6	8	355,874	474,228,616	0.08
Oily Wastes	D	6	8	37,815	116,772,943	0.03
Printed Wiring Board	I	2	4	70,563	35,930,097	0.20
Printed Wiring Board	D	2	4	160,184	1,029,783,596	0.02
Railroad Line Maintenance	I&D	10	8	184,261	n.a.	n.a.
Shipbuilding Dry Dock	I&D	10	8	220,492	192,018,827	0.11
Steel Forming & Finishing	I	2	4	114,851	69,640,244	0.17
Steel Forming & Finishing	D	2	4	46,945	32,759,295	0.14

Note: Technology Options 1 through 10 are described in Section VIII.A of the preamble.

^a EPA is not proposing the new source option considered in this analysis for the Non-Chromium Anodizing, Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Dock subcategories. See Section XIII for a discussion on new source options selection.

^b Incremental to baseline new source requirements (found in 40 CFR 433 and 420, as applicable) for Metal Finishing Job Shop, Printed Wiring Board and Steel Forming & Finishing new sources.

^c Equal to the average revenues of existing facilities in the same quartile based on flow size of the new source model facility, excluding existing facilities that close or experience moderate impacts in the baseline. Assumes the same percentage price increases for new as for existing sources under the proposed option.

^d Includes existing facilities in all flow categories that continue operating post-compliance.

New sources in all but the Metal Finishing Job Shop direct discharger subcategory incur costs that are below one percent of post-regulation revenues. Cost increases of this magnitude are unlikely to place new facilities at a competitive disadvantage relative to existing sources. Moreover, costs as a percentage of revenues are generally comparable for new sources and existing sources with which they will compete.

Railroad line maintenance facilities do not have revenue reported at the facility level, and it is therefore not possible to compare costs as a percent of facility revenue for new and existing facilities in this subcategory. The representative new source railroad line maintenance facility would incur annualized costs (\$184,261) that are somewhat higher than those incurred by existing facilities in this subcategory (which range from zero to \$122,042.)

See Section XIII for a discussion of new source options selection. EPA notes that it did not select the "New Source Option Considered" in Table XVI-15, above, for the Non-Chromium Anodizing, Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Dock subcategories, but rather selected a lower cost option for new sources.

H. Social Costs

1. Components of Social Costs

The social costs of regulatory actions are the opportunity costs to society of employing scarce resources in pollution control activity. The largest component of economic costs to society is the cost incurred by MP&M facilities for the labor, equipment, material, and other economic resources needed to comply with the proposed rule.

The social costs associated with the proposed MP&M regulation differ from the compliance costs estimated to assess impacts on the regulated facilities and firms, because of different treatment of taxes. Social costs include compliance costs that are considered on a before-tax basis. Privately-owned facilities are able to deduct the costs of compliance as business expenses, reduce their tax liability for a given level of revenue, and thereby share the burden of the costs with other taxpayers. The burden is shared with other taxpayers because the Federal government loses the money saved by industry through tax shields. The cost to society includes the costs borne by industry, as well as the cost borne by the Federal government through lost tax revenues. The cost to society, therefore, is higher than the cost to industry. The annualized lost Federal tax revenues can be calculated as the

difference between the annualized cost before and after tax shields.

Social costs also include lost producers' and consumers' surplus that result when the quantity of goods and services produced decreases as a result of the rule. Lost producers' surplus is measured as the difference between revenues earned and the cost of production for the lost production. Lost consumers' surplus is the difference between the price paid by consumers for the lost production and the maximum amount they would have been willing to pay for those goods and services. Calculating lost producers' and consumers' surplus accurately requires knowledge of the characteristics of market supply and demand for each affected industry. EPA instead calculated an upper-bound estimate of social compliance costs using the simplifying assumption that all facilities continue operating in compliance with the rule, and pay the associated compliance costs (*i.e.*, assuming that there are no regulation-related closures.) This provides an upper-bound estimate of social costs because, for facilities predicted to close, continuing to operate and incurring compliance costs is more costly than closing the facility with the lost producers' and consumers' surplus associated with the closure.

In addition to the resource costs to society associated with compliance, the estimated social cost includes two other cost elements: the cost to local governments of implementing the rule and the costs associated with unemployment that may result from the proposed regulation. The government administration costs include the costs to POTWs of permitting and compliance monitoring and enforcement activities. The unemployment-related costs include the cost of administering unemployment programs for workers who would lose employment, and an estimate of the amount that workers would be willing to pay to avoid involuntary unemployment.

2. Resource Cost of Compliance

The resource costs of compliance are the value of society's productive resources—including labor, equipment, and materials—expended to achieve the reductions in effluent discharges required by the proposed rule. The social costs of these resources are higher than the costs incurred by facilities because facilities are able to deduct the costs from their taxable income. The costs to society, however, are the full value of the resources used, whether they are paid for by the regulated facilities or by all taxpayers in the form of lost tax revenues. EPA calculated

costs at a 7 percent rate. EPA included facilities predicted to close due to the rule when calculating social costs.

The estimated after-tax private compliance costs incurred by facilities, excluding costs for facilities that close, are \$1.3 billion. The estimated social value of these compliance costs, calculated before-tax assuming no regulatory closures, is \$2.0 billion. This represents the value to society of the resources that would be used to comply with the proposed rule if all facilities continued to operate rather than some closing due to the rule. This estimate represents an upper-bound social value of the compliance resources associated with the proposed rule.

3. Cost of Administering the Proposed Regulation

EPA estimated the cost to governments of administering the proposed regulation, including the use of labor and material resources to write permits/control mechanisms under the regulation and to conduct compliance monitoring and enforcement activities.

EPA does not expect increases in administrative costs for facilities that discharge their wastewater directly to surface water, because the National Pollution Discharge Elimination System (NPDES) permit program requires that these facilities hold permits. POTWs will incur additional permitting costs for indirect dischargers that do not already have a control mechanism (*e.g.*, permit) prior to implementation of the proposed rule.

Information on the baseline number of indirect dischargers with control mechanisms comes from the industrial detailed facility surveys, which reported the baseline permit status of each MP&M facility. (See Section V.B for a description of EPA's survey questionnaires.) EPA estimated costs and impacts for these facilities. Results of the impact analysis indicate that of the 58,922 MP&M facilities continuing to operate in the baseline (including 64 avoided baseline closures), 199 facilities are expected to close rather than comply with the regulation. Another 49,147 are excluded or fall below the proposed low flow cut-offs. Of the 9,577 facilities that are expected to continue operating and comply with the regulation, 4,633 facilities are direct dischargers and 4,944 are indirect dischargers. EPA estimates that 4,296 of the indirect dischargers already have permits or other control mechanisms (629 with concentration-based permits and 3,667 with mass-based permits) and that 648 indirect discharging facilities will be required to get a permit/control mechanism for the first time.

EPA conducted the POTW survey of 150 POTWs to support analysis of the administrative burdens imposed by the proposed rule on POTWs that receive discharges from MP&M facilities. The questionnaire requested detailed information on the costs of various activities per facility permitted, including estimated hours required to develop and issue permits/control mechanisms, provide technical guidance, inspect facilities, conduct sampling, review compliance reports, take enforcement actions, and repermit facilities. The survey requested this information for facilities of different sizes (based on flow). In addition, the survey requested information on the frequency with which specific administrative activities are required for activities that are not required for every permitted facility (such as conducting a public hearing). EPA used the POTW survey responses to estimate a range of permitting labor hour burdens and costs

per MP&M facility permitted, with separate estimates for concentration- and mass-based permits/control mechanisms. This analysis is presented in Appendix C of the EEBA.

Estimated annualized POTW administrative costs for each facility issued a new concentration-based control mechanism range from \$236 to \$1,890, and from \$240 to \$1,924 for each facility issued a new mass-based control mechanism, with the range depending on the complexity of the facility being permitted. EPA applied these costs per facility to the estimated number of facilities requiring new control mechanisms or conversion of a concentration-based to a mass-based control mechanism each year, to estimate the total administrative cost to permitting authorities. (See Section XXI.B for a discussion on implementation of the MP&M limitations and standards.)

EPA is requiring mass-based permits/control mechanisms only for the Steel

Forming and Finishing subcategory. For other subcategories, permit writers and control authorities can determine what type of permit/control mechanism to issue. EPA is encouraging POTWs to institute mass-based limits where possible, however. (See Section XXII.B.) For purposes of estimating costs, EPA assumed that all Steel Forming and Finishing and one-third of the permits/control mechanisms issued in other subcategories will be mass-based.

Table XVI-16 summarizes the estimated range of administrative costs that will be incurred by POTWs under the proposed rule. The estimates reflect the low and high estimates of permitting cost per facility, and take account of the need to repermit indirect dischargers with existing control mechanisms (e.g., permits) within the three year compliance period rather than on the normal five-year permitting schedule. These estimates are described in detail in Chapter 7 of the EEBA.

TABLE XVI-16.—POTW ADMINISTRATIVE COSTS: PROPOSED RULE

Number of facilities permitted:	
Converted from existing concentration-based to mass-based	* 223
Issued new concentration-based permit	* 432
Issued new mass-based permit	* 216
Repermitted 1-2 years earlier	4,073
Number of closing facilities with existing permits not requiring repermitting under the proposed rule	143
Total POTW Administrative Costs (net present value of incremental costs over 15 years) (million \$1999)	\$1.407-\$8.311
Total POTW Administrative Costs (annualized over 15 years @ 7% (million \$1999)	\$0.115-\$0.912

* Assumes that permitting authorities will chose to issue mass-based control mechanisms (e.g., permits) to 1/3 of the facilities requiring new permits, and 1/3 of the facilities with existing concentration-based permits, other than Steel Forming & Finishing. Mass-based permits are assumed for all 20 Steel Forming & Finishing facilities that currently have a concentration-based permit.

Total estimated government administration costs therefore range from \$0.1 to \$0.9 million (\$1999) annually. EPA expects that this increase in costs will be partially offset by reductions in government administrative costs for facilities that are already permitted under local limits and that will be repermited under this rule. The technical guidance provided by EPA as a part of this rulemaking may reduce the research required by permit writers and control authorities in developing Best Professional Judgement (BPJ) permits/control mechanisms for industrial dischargers not previously covered by a categorical standard or a water quality standard. Further, the establishment of discharge standards may reduce the frequency of evidentiary hearings. The promulgation of limitations may also enable EPA and the authorized States to cover more facilities under general permits. EPA did not estimate these cost savings to permitting authorities that may result from the rule.

4. Social Cost of Unemployment

The loss of jobs associated with facility closures represent a social cost of the proposed rule. The social cost of unemployment includes two components: the losses suffered by the workers that experience involuntary loss of employment, and the cost to the government of administering the unemployment compensation program for these workers.

EPA calculated the first cost of worker dislocation based on an estimate of the value that workers would pay to avoid an involuntary job loss. The estimate of the amount that workers would pay to avoid job losses was derived from hedonic studies of the compensation premium required by workers to accept jobs with a higher probability of unemployment. This framework has been used in the past to impute a trade-off between wages and job security (Topel, 1984; Adams, 1985). This estimate approximates a one-time willingness-to-pay to avoid an involuntary episode of unemployment

and reflects all monetary and non-monetary impacts of involuntary unemployment incurred by the worker. It does not include any offsets to the cost of unemployment such as unemployment compensation or the value of increased leisure time. EPA estimates that workers would be willing to pay between \$90,840 and \$119,900 (\$1999) to avoid a case of involuntary employment. Annualized over 15 years at a discount rate of 7 percent, this willingness to pay is between \$9,974 and \$13,164 per lost job. The cost associated with a projected loss of 5,916 jobs due to facility closures under the proposed rule therefore has an estimated annual social cost of \$59.0 million and \$77.9 million.

Unemployment as the result of regulation also imposes costs on society through the additional administrative burdens placed on the unemployment system. The cost of unemployment benefits themselves is not a social cost but instead a transfer payment within society from taxpayers to unemployed

workers. Administrative costs include the cost of processing unemployment claims, retraining workers, and placing workers in new jobs. Data obtained from the Interstate Conference of Employment Security Agencies indicated that the cost of administering an initial unemployment claim over the period averaged \$119 (\$1999). This cost includes total Federal and State funding for administering unemployment benefit programs but excludes the value of benefits. Based on these data, EPA assumed that the cost of administering unemployment programs for job losses caused by the MP&M regulation would amount to approximately \$120 per job

loss. Multiplying this figure by estimated loss of 5,916 jobs due to facility closures under the proposed regulation yields an additional \$709,920 in social costs. EPA annualized this value over the 15-year analysis period at the 3 percent social discount rate to yield an annual cost of \$77,945 (\$1999).

This estimate of social costs does not take into account the increased production and employment at MP&M facilities that continue to operate under the proposed rule. These facilities are likely to gain business when some facilities close due to the rule. In addition, the analysis does not reflect the jobs created by facilities' actions to

comply with the rule. The net effect of job losses due to facility closures and job gains associated with compliance activities is an increase of 2,575 FTE-years over 15 years. This estimate assumes that displaced workers remain unemployed for one year on average, and that all layoffs and compliance related investments occur over the first three years after promulgation. Table XVI-17 shows the timing of projected employment impacts, and the net effect on employment over 15 years. (EPA's estimates of the employment effects of the proposed rule are presented in Chapter 6 of the EEBA.)

TABLE XVI-17.—ESTIMATED DIRECT NET IMPACTS ON EMPLOYMENT OVER 15 YEARS, PROPOSED RULE
[Number of FTEs per year and total FTE-years]

Year	One-time manufacturing and installation ^a	Annual O&M ^a	Closures ^b	Net change in employment
1	1,496	95	1,972	(381)
2	1,496	190	1,972	(286)
3	1,496	286	1,972	(190)
4		286		286
5		286		286
6		286		286
7		286		286
8		286		286
9		286		286
10		286		286
11		286		286
12		286		286
13		286		286
14		286		286
15		286		286
Total FTE-years over 15 years	4,488	4,003	5,916	2,575

^a Assumes that one-third of facilities come into compliance in each of 3 years.

^b Assumes that one-third of the facilities projected to close do so in each of the first 3 years.

EPA calculated a range of social costs of changes in employment under the proposed rule, with the lower bound reflecting no net loss of employment and the upper bound considering only the 5,916 job losses resulting from closures. The social costs associated with unemployment were therefore estimated to range from zero to \$78.0 million, including an upper-bound \$77.9 million in worker's willingness to pay to avoid involuntary unemployment and less than \$0.1 million in the additional costs of administering

unemployment benefits. The estimated upper-bound employment-related social cost is likely to be substantially overstated, since it does not consider the social value of net increases in employment due to compliance activities and the increases in production that may occur at MP&M facilities that continue to operate post-compliance.

5. Total Social Costs

Summing across all social costs results in a total social cost estimate of

\$2.0 to \$2.1 billion annually (\$1999), as shown in Table XVI-18. This estimate represents an upper bound value of social costs, since it assumes that all facilities remain open and incur compliance costs rather than closing in some cases. This assumption is made only to calculate the resource value of compliance expenditures; closures are considered in calculating the social cost of unemployment.

TABLE XVI-18.—ANNUAL SOCIAL COSTS OF THE PROPOSED RULE
[Million \$1999, annualized @ 7%]

Social cost category	Lower bound estimate	Upper bound estimate
Resource Value of Compliance Costs (before-tax)	\$2,033.7	
Government Administrative Costs	\$0.1	\$0.9
Social Costs of Unemployment	0	\$78.0

TABLE XVI-18.—ANNUAL SOCIAL COSTS OF THE PROPOSED RULE—Continued

[Million \$1999, annualized @ 7%]

Social cost category	Lower bound estimate	Upper bound estimate
Total Social Costs	\$2,033.8	\$2,122.6

XVII. Cost-Effectiveness Analysis**A. Methodology**

EPA performed a cost-effectiveness analysis of the alternative regulatory options for indirect dischargers (PSES) and direct dischargers (BAT). Cost-effectiveness analysis is used in the development of effluent limitations guidelines to evaluate the relative efficiency of alternative regulatory options in removing toxic pollutants from the effluent discharges to the nation's waters.

The cost-effectiveness of a regulatory option is defined as the incremental annual cost (in 1981 constant dollars) per incremental toxic-weighted pollutant removals for that option. This definition includes the following concepts:

- *Toxic-weighted removals.*

Pollutants differ in their toxicity. Therefore, the estimated reductions in pollution discharges, or pollutant removals, are adjusted for toxicity by multiplying the estimated removal quantity for each pollutant by a normalizing toxic weight (Toxic Weighting Factors). The toxic weight for each pollutant measures its toxicity relative to copper, with more toxic pollutants having higher toxic weights. The use of toxic weights allows the removals of different pollutants to be expressed on a constant toxicity basis as toxic pound-equivalents (lb-eq). The removal quantities for the different pollutants may then be summed to yield an aggregate measure of the reduction in toxicity-normalized pollutant discharges

that is achieved by a regulatory option. The cost-effectiveness analysis does not address the removal of conventional pollutants (oil and grease, biochemical oxygen demand, and total suspended solids), nor does it address the removal of bulk parameters, such as COD.

- *Annual costs.* The costs used in the cost-effectiveness analysis are the estimated annualized before-tax costs to comply with the alternative regulatory options. The cost to facilities to remove these pollutants will be less because the costs are tax deductible. The annual costs include the annual expenses for operating and maintaining compliance equipment, meeting monitoring requirements, and some pollution prevention activities. Annualized components include capital outlays for treatment systems.

- *Incremental calculations.* The incremental values are the changes in total annual compliance costs and changes in removals from the next less stringent option, or from the baseline if there is no less stringent option, where regulatory options are ranked by increasing levels of toxic-weighted removals. The resulting cost-effectiveness values for a given option are therefore expressed relative to another option or, for the least stringent option considered, relative to the baseline.

The result of the cost-effectiveness calculation represents the unit cost of removing the next pound-equivalent of pollutants and is expressed in constant 1981 dollars per toxic pound-equivalent

removed (\$/lb-eq) to allow comparisons with other options being considered. Although not required by the Clean Water Act, cost-effectiveness analysis is a useful tool for evaluating regulatory options that address toxic pollutants.

EPA performed the cost-effectiveness analysis for the MP&M regulation separately for indirect dischargers (subject to PSES) and direct dischargers (subject to BAT). The following sections summarize the results for the two classes of facilities. EPA notes that for all subcategories, it is proposing options only BPT or is setting BAT equal to BPT, as there is no additional technology used at BAT. The Agency does not use C-E analysis to assess options for BPT. Therefore, the C-E analysis for direct dischargers is presented only for informational purposes. See Section IX for a discussion of BPT cost-reasonableness.

B. Cost-Effectiveness Analysis for Indirect Dischargers

Table XVII-1 summarizes the cost-effectiveness analysis for the PSES regulatory options applicable to indirect dischargers. Annual compliance costs are shown in 1999 dollars and also in 1981 dollars. The regulatory options are listed in order of increasing stringency on the basis of the estimated toxic-weighted pollutant removals. Estimates of costs and pollutant removals do not include facilities that close in the baseline. (See Section XVI.B.4 for a discussion on the baseline closure analysis.)

TABLE XVII-1.—COST-EFFECTIVENESS FOR INDIRECT DISCHARGERS

Regulatory option	Annual before-tax compliance costs (excluding regulatory closures)			Weighted pollutant removals		Cost-effective- ness ratio (\$1981/lb-eq)
	Total cost (million \$1999)	Total cost (million \$1981)	Incremental cost (million \$1981)	Total removals (000 lbs-eq)	Incremental removals (000 lbs-eq)	
Proposed Option	1,730.1	1,009.2	1,009.2	9,372.3	9,372.3	108
Option 2/6/10	2,421.9	1,412.8	403.6	9,755.5	383.2	1,053
Option 4/8	3,795.1	2,213.8	801.0	9,936.9	181.4	4,416

As shown in Table XVII-1, the proposed option removes 9.4 million toxic-weighted pounds. The proposed option is the least stringent of those considered, and the incremental and

average cost-effectiveness is \$108 per pound-equivalent removed.

Option 2/6/10 would remove an additional 0.4 million toxic weighted pounds, at an incremental cost of \$0.38

billion (\$1981), for an incremental cost-effectiveness ratio of \$1,053 per pound-equivalent removed. The differences between the proposed option and Option 2/6/10 for indirect dischargers

include the proposed option's one million gallon per year cutoff for the General Metals subcategory, two million gallon per year cutoff for the Oily Wastes subcategory, and exclusion of new pretreatment standards for the Non-Chromium Anodizing, Railroad Line Maintenance and Shipbuilding Dry Dock subcategories. These provisions of

the proposed rule reduce before-tax compliance costs by 40 percent compared with Option 2/6/10, while losing 4 percent of the pound-equivalents removed. EPA discussed the rationale for the selected flow cutoffs for each subcategory in Section XII of today's proposal.

Option 4/8 would remove an additional 0.18 million pound-equivalents, as compared with Option 2/6/10, at an additional cost of \$0.8 billion (\$1981), or \$4,416 per pound-equivalent.

Table XVII-2 presents the results of the cost-effectiveness analysis for indirect dischargers by subcategory.

TABLE XVII-2.—COST-EFFECTIVENESS FOR INDIRECT DISCHARGERS BY SUBCATEGORY

Subcategory and regulatory option	Incremental before-tax compliance cost (million \$1981)	Incremental removals (lbs-eq)	Cost-effectiveness ratio (\$1981/lb-eq)
Printed Wiring Boards			
Proposed Option	81.17	1,195,260	68
Option 2/6/10 .....	.....	.....	.....
Option 4/8	40.87	8,010	5,103
Metal Finishing Job Shops			
Proposed Option	68.82	1,766,063	39
Option 2/6/10 .....	.....	.....	.....
Option 4/8	26.54	62,554	424
General Metals			
Proposed Option	844.52	6,216,887	136
Option 2/6/10	279.12	318,594	876
Option 4/8	487.21	103,514	4,707
Non-Chromium Anodizing			
Proposed Option .....	.....	.....	.....
Option 2/6/10	15.23	13,598	1,120
Option 4/8	7.27	434	16,756
Oily Wastes			
Proposed Option	2.52	14,140	178
Option 2/6/10	109.04	51,008	2,138
Option 4/8	232.35	5,885	39,484
Railroad Line Maintenance			
Proposed Option .....	.....	.....	.....
Option 2/6/10	0.15	17	8,560
Option 4/8	0.13	132	995
Shipbuilding Dry Dock			
Proposed Option .....	.....	.....	.....
Option 2/6/10	0.10	0	767,794
Option 4/8	0.00	26	0
Steel Forming and Finishing			
Proposed Option	12.19	179,900	68
Option 2/6/10 .....	.....	.....	.....
Option 4/8	6.63	865	7,659

The proposed option for indirect dischargers in the Printed Wiring Board, Metal Finishing Job Shops, and Steel Forming and Finishing subcategories is the same as Option 2/6/10. The proposed option includes a flow cutoff of one million and two million gallons

per year for General Metals and Oily Wastes, respectively. Therefore, there are no proposed pretreatment standards for all indirect dischargers that fall below those cutoffs. There are also no proposed pretreatment standards for indirect dischargers in the Non-

Chromium Anodizing, Railroad Line Maintenance and Shipbuilding Dry Dock subcategories. In developing regulatory options for indirect dischargers, EPA considered a range of possible exclusions from 1 mg/y to 6.25 mg/y for all subcategories. Information of

the cost-effectiveness for each regulatory option under each flow cutoff by subcategory can be found in "Analysis of Cost-Effectiveness by Flow Category", which is available in the rulemaking docket.

C. Cost-Effectiveness Analysis for Direct Dischargers

Table XVII-3 summarizes the cost-effectiveness analysis for the BAT regulatory options applicable to direct

dischargers and Table XVII-4 presents the analysis by subcategory. As before, regulatory options are ranked in order of increasing stringency.

TABLE XVII-3.—COST EFFECTIVENESS FOR DIRECT DISCHARGERS

Regulatory option	Annual before-tax compliance costs (excluding regulatory closures)			Weighted pollutant removals		Cost-effective- ness ratio (\$1981/lb-eq)
	Total cost (million \$1999)	Total cost (million \$1981)	Incremental cost (million \$1981)	Total removals (000 lbs-eq)	Incremental removals (000 lbs-eq)	
Proposed Option	245.8	143.4	143.4	\$1,333.6	1,333.6	107
Option 2/6/10	245.8	143.4	0.0	1,333.6	0.0	.....
Option 4/8	381.6	222.6	79.2	1366.7	33.1	2,391

The proposed BAT option for direct dischargers achieves removal of 1.3 million pounds on a toxic-weighted basis, with a cost-effectiveness of \$107 (\$1981). Because the only differences between Option 2/6/10 and the

proposed option occur for indirects (i.e. flow cutoffs and no regulation options), Option 2/6/10 is the same as the proposed option for direct dischargers.

Option 4/8 would remove an additional 33,000 pound-equivalents, as compared with the proposed option, at

an additional cost of \$80 million (\$1981), or \$2,391 per pound-equivalent.

Table XVII-4 presents the results of the cost-effectiveness analysis for direct dischargers by subcategory.

TABLE XVII-4.—COST-EFFECTIVENESS FOR DIRECT DISCHARGERS BY SUBCATEGORY

Subcategory and regulatory option	Incremental before-tax compliance cost (million \$1981)	Incremental removals (lbs-eq)	Cost-effective- ness ratio (\$1981/lb-eq)
Printed Wiring Boards			
Proposed Option	1.42	64,573	22
Option 2/6/10 .....	.....	.....	.....
Option 4/8	1.14	2,270	501
Metal Finishing Job Shops			
Proposed Option	0.69	14,194	49
Option 2/6/10 .....	.....	.....	.....
Option 4/8	0.52	265	1,968
General Metals			
Proposed Option	114.54	899,372	127
Option 2/6/10 .....	.....	.....	.....
Option 4/8	52.20	21,620	2,414
Non-Chromium Anodizing *			
Proposed Option	NA	NA	.....
Option 2/6/10	NA	NA	.....
Option 4/8	NA	NA	.....
Oily Wastes			
Option 4/8	**	**	**
Proposed Option	6.42	16,069	399
Option 2/6/10	0.00	0	.....
Railroad Line Maintenance			
Proposed Option	0.67	174	3,831
Option 2/6/10 .....	.....	.....	.....
Option 4/8	0.05	23	2,181
Shipbuilding Dry Dock			
Proposed Option	1.24	111	11,179

TABLE XVII-4.—COST-EFFECTIVENESS FOR DIRECT DISCHARGERS BY SUBCATEGORY—Continued

Subcategory and regulatory option	Incremental before-tax compliance cost (million \$1981)	Incremental removals (lbs-eq)	Cost-effectiveness ratio (\$1981/lb-eq)
Option 2/6/10 .....	.....	.....	.....
Option 4/8	*** - 0.91	*** 335	*** - 2,728
Steeling Forming and Finishing			
Proposed Option	18.39	339,147	54
Option 2/6/10 .....	.....	.....	.....
Option 4/8	1.28	8,977	143

* EPA estimates that there are no direct discharging Non-Chromium Anodizing facilities.

** Option 4/8 removes 15,703 lbs equivalent at a cost of \$31.34 million. The proposed option removes more lbs equivalent at a lower cost. The proposed option therefore dominates Option 4/8, and results are not shown here for Option 4/8.

*** Option 4/8 removes more lb-eq. than the proposed option at a lower cost. See Section XVII-D for a discussion of the impacts of the proposed option on conventional pollutant removals. Option 4/8 removes 446 lbs-equivalent at a cost of \$0.33 million at an average cost-effectiveness incremental to baseline of \$740/lb-eq.

The proposed option is more stringent than Option 4/8 for the Oily Wastes subcategory, in that it removes more toxic-weighted pounds of pollutants and costs less than Option 4/8. It therefore dominates Option 4/8 from the perspective of toxic pollutant removals, and has an average cost per pound-equivalent removed of \$399 (\$1981). Again, EPA is proposing options only for BPT or is setting BAT equal to BPT for all subcategories, as there is no additional technology used at BAT. The Agency does not use C-E analysis to assess options for BPT. Therefore, the C-E analysis for direct dischargers is presented only for informational purposes.

Table XVII-4 shows a high cost-effectiveness for the Railroad Line Maintenance and the Shipbuilding Dry Dock subcategories. EPA is not proposing BAT limitations for these subcategories because of the small quantities of toxic pollutants in the wastewater from facilities in these subcategories. (See Section XI.) However, EPA is proposing BPT limitations for these subcategories in order to control the discharge of conventional pollutants. See Section IX for a discussion of BPT options selection and the results of the BPT cost-reasonableness analysis.

XVIII. Non-Water Quality Environmental Impacts

Sections 304(b) and 306 of the Act require EPA to consider non-water quality environmental impacts (including energy requirements) associated with effluent limitations guidelines and standards. In accordance with these requirements, EPA has considered the potential impact of the

proposed regulation on energy consumption, air emissions, and solid waste generation.

While it is difficult to balance environmental impacts across all media and energy use, the Agency has determined that the impacts identified below are justified by the benefits associated with compliance with the limitations and standards (see Sections XIX and XX for a discussion on the environmental benefits associated with this proposed regulation).

A. Air Pollution

The Agency believes that the in-process and end-of-pipe technologies included in the technology options for this regulation do not generate air emissions. (See Section VIII for a discussion of the technology options.)

The use of halogenated hazardous air pollutant solvent (methylene chloride, perchloroethylene, trichloroethylene, 1,1,1 trichloroethane, carbon tetrachloride and chloroform) for cleaning in the MP&M industry can create hazardous air pollutant emissions. The Agency believes this regulation will not affect the use of halogenated hazardous air pollutant solvent in the MP&M industry. This regulation neither requires nor discourages the use of aqueous cleaners in lieu of halogenated hazardous air pollutant solvent.

The Agency is developing National Emission Standards for Hazardous Air Pollutants (NESHAPs) under section 112 of the Clean Air Act (CAA) to address air emissions of the hazardous air pollutants (HAPs) listed in Title III of the CAA Amendments of 1990. Below, EPA lists the current and upcoming NESHAPs that may

potentially affect HAP emitting activities at MP&M facilities:

- Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks;
- Halogenated Solvent Cleaning;
- Aerospace Manufacturing;
- Shipbuilding and ship repair (Surface Coating);
- Large appliances (Surface Coating);
- Metal Furniture (Surface Coating);
- Automobile and light-duty truck manufacturing (Surface Coating); and
- Miscellaneous Metal Parts and Products (Surface Coating).

B. Solid Waste

Solid waste generation includes hazardous and nonhazardous wastewater treatment sludge as well as waste oil removed in wastewater treatment. EPA estimates that compliance with this regulation will result in a decrease in wastewater treatment sludge and an increase in waste oil generated at MP&M facilities.

According to EPA's detailed questionnaires, the Agency estimates that MP&M facilities generate 267 million gallons (4 million cubic yards) of wastewater treatment sludge and 805 million gallons of waste oil from the treatment of wastewater. In Table XVIII.B-1, EPA presents the amount of wastewater treatment sludge and waste oil expected to be generated at the selected technology option. The table also shows the amount of wastewater treatment sludge and waste oil that would be generated by the selected technology option if EPA had not included pollution prevention as part of its selected technology option.

TABLE XVIII.B-1.—WASTE TREATMENT SLUDGE AND OIL GENERATION BY OPTION

Option	Wastewater treatment sludge generated (million gallons/year)	Waste oil generated (million gallons/year)
Baseline ¹	267	805
Proposed Options without water conservation and P2	207	2,000
Proposed Options with water conservation and P2	206	1,600

Source: U.S. Environmental Protection Agency.

¹ EPA calculated the baseline sludge and waste oil generation using responses to the 1989 MP&M Phase I Questionnaire and the 1996 MP&M Phase II Detailed Questionnaires.

As shown in Table XVII.B-1, wastewater treatment sludge generation decreased from baseline to the selected option without in-process flow control. EPA attributes the net decrease to the fact that this option includes sludge dewatering, which may result in a significant decrease in sludge generation for sites that have chemical precipitation and settling technologies without sludge dewatering in place at baseline. The Agency did not estimate additional sludge reduction at facilities which already have sludge dewatering in place at baseline. EPA does expect an increase of sludge production at MP&M facilities which do not have treatment in place and must install treatment as a result of the MP&M rule.

Table XVIII.B-1 shows that the water conservation and pollution prevention technologies included in the proposed options further reduce the amount of sludge generated. EPA expects these technologies to result in sludge reduction for the following reasons:

- Recycling of coolants and recycling of paint curtains reduce the mass of pollutants in treatment system influent streams, which in turn reduces the amount of sludge generated during metals removal;
- Bath maintenance practices, including good operational practices regarding drag out in plating processes, included in the proposed options, reduce the mass of metal pollutants discharged to treatment, which in turn reduces the amount of sludge generated during metals removal; and
- Water conservation technologies included in the proposed options reduces the discharge mass of metals present in the source water to a site (e.g., calcium, sodium), which in turn reduces the amount of sludge generated during removal of these metals.

EPA classifies many of the sludges generated at MP&M facilities as either a listed or characteristic hazardous waste under the Resource Conservation and

Recovery Act (RCRA) based on the following information:

- If the facility performs electroplating operations, EPA classifies the resulting sludge as an EPA hazardous waste number F006 (40 CFR 261.31). If the facility mixes the wastewater from these electroplating operations with other non-electroplating wastewater for treatment, then EPA still considers all of the sludge generated from the treatment of this commingled wastestream to be a listed hazardous waste F006, or
- If the sludge or waste oil from wastewater treatment exceeds the standards for the Toxicity Characteristic (*i.e.*, is hazardous), or exhibits other RCRA-defined hazardous characteristics (*i.e.*, reactive, corrosive, or flammable), EPA considers it a characteristic hazardous waste (40 CFR 261.24.)

It is also important to note that EPA does not include chemical conversion coating, electroless plating, and printing circuit board manufacturing under the F006 listing (51 FR 43351, December 2, 1986). And if the facility performs certain chemical conversion coating operations on aluminum, EPA classifies the resulting sludge as EPA hazardous waste number F019.

Additional federal, state, and local regulations may result in MP&M sludges being classified as hazardous wastes. Facilities should check with the applicable authorized (State or EPA Regional) authority to determine if other regulations apply.

Based on information collected during site visits and sampling episodes, the Agency believes that some of the solid waste generated would not be classified as hazardous. However, for purposes of compliance cost estimation, the Agency assumed that all solid waste generated as a result of the technology options would be hazardous.

As stated above in Section XV, EPA expects that the rule will reduce metal contaminants in the sludges generated by POTWs and will allow POTWs to

dispense of the lower metal content sludge by more environmentally beneficial methods.

EPA attributes the increase in waste oil generation from baseline to the proposed option to the removal of oil from MP&M wastewater prior to discharge to POTWs or surface waters. MP&M facilities usually either recycle waste oil on site or off site, or contract haul it for disposal as either a hazardous or nonhazardous waste. The estimated increase of waste oil generation as a result of the MP&M proposed rule reflects a better removal of oil and grease by the proposed technology options than that being achieved at baseline and does not reflect an increase in overall oil generation at MP&M facilities. For the purpose of compliance cost estimation, EPA assumed that all MP&M facilities contract hauled waste oil for disposal; however, EPA expects that some facilities may recycle waste oil either on site or off site.

Table XVIII.B-1 shows that the inclusion of water conservation and pollution prevention in the proposed option results in the generation of less waste oil. EPA attributes this decrease in waste oil generation to the 80 percent reduction of coolant discharge using the recycling technology included in the proposed technology train. This system recovers and recycles oil-bearing machining coolants at the source, reducing the generation of spent coolant.

C. Energy Requirements

EPA estimates that compliance with this regulation will result in a net increase in energy consumption at MP&M facilities. EPA presents the estimates of increased energy usage for the selected option in Table XVIII.C-1. The table also shows the amount of energy that would be required by the selected technology option if EPA had not included pollution prevention as part of its selected technology option. The in-process flow control and recycling technologies included in

EPA's proposed options reduce the amount of water use and in doing so also require energy. Therefore, the amount of energy required for the selected option incorporating pollution prevention and water conservation was slightly greater than the proposed option without pollution prevention and water conservation techniques.

TABLE XVIII.C-1.—ENERGY REQUIREMENTS BY OPTION

Option	Energy required (million kilowatt hrs/yr)
Baseline ¹	248
Proposed Options without water conservation and P2 ...	347
Proposed Options without water conservation and P2 ...	364

Source: U.S. Environmental Protection Agency.

¹EPA calculated the baseline sludge and waste oil generation using responses to the 1989 MP&M Phase I Questionnaire and the 1996 MP&M Phase II Detailed Questionnaires.

By comparison, electric power generation facilities generated 3,123 billion kilowatt hours of electric power in the United States in 1997 (The Energy Information Administration, Electric Power Annual 1998 Volume 1, Table A1). Additional energy requirements for EPA's proposed options correspond to approximately 0.01 percent of national requirements. The increase in energy requirements due to the implementation of MP&M technologies will in turn cause an air emissions impact from the electric power generation facilities. The increase in air emissions is expected to be proportional to the increase in energy requirements or approximately 0.01 percent.

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Information Administration, Electric Power Annual 1998 Volume 1, Table A1). Additional energy requirements for EPA's proposed options correspond to approximately 0.01 percent of national requirements. The increase in energy requirements due to the implementation of MP&M technologies will in turn cause an air emissions impact from the electric power generation facilities. The increase in air emissions is expected to be proportional to the increase in energy requirements or approximately 0.01 percent.

XIX. Water Quality, Sewage Sludge, and Other Environmental Impacts

A. Introduction

MP&M facilities nationwide currently discharge an estimated 5,025 million pounds of pollutants per year to publicly-owned treatment works (POTWs) and approximately 410 million pounds of pollutants directly to surface waters. MP&M facility effluents contain 42 priority or toxic pollutants, 86 nonconventional pollutants, and three conventional pollutants (biological oxygen demand (BOD), total suspended solids (TSS), and oil and grease (O&G)).

The release of these pollutants to our nation's surface water degrades aquatic environments, alters aquatic habitats, and affects the diversity and abundance of aquatic life. It can also increase the risks to the health of humans who ingest contaminated surface waters or eat contaminated fish and shellfish. A number of the pollutants commonly found in MP&M effluents also inhibit biological wastewater treatment systems or accumulate in sewage sludge.

Metals are a particular concern because of their prevalence in MP&M effluents. Metals are inorganic compounds that are generally non-volatile (with the notable exception of mercury) and are not broken down by biodegradation processes. Metals can accumulate in biological tissues, sequester into POTW sewage sludge, and contaminate soils and sediments when released to the environment. Some metals are quite toxic even when present at relatively low levels.

Of the 131 MP&M pollutants of concern for which loadings were estimated, 35 exhibit moderate to high toxicity to aquatic life; 77 are human non-cancer toxicants; 13 are classified as known or probable human carcinogens; 46 bioaccumulate in aquatic organisms and persist in the environment, and 35 are hazardous air pollutants (HAPs). HAPs are compounds which EPA believes may represent an unacceptable risk to human health if present in the air.

B. Beneficial Impacts of the MP&M Proposed Rule

Changes under the proposed rule include:

- Water quality changes;
- Reduced aquatic life impacts;
- Reduced POTW inhibitions;
- Reduced costs for sewage sludge disposal; and
- Reduced human health impacts.

The first three changes due to the proposed rule are discussed in this section, and the last two are discussed in Section XX. EPA estimated these changes for three options. This section presents results for the proposed option, Option 2/6/10 and Option 4/8. See Section VIII for a description of the options. Results are discussed for only the proposed option, however, to reduce the length of the document. Benefits were not estimated for Options 1, 3, 5, 7, and 9 (options without pollution prevention) because these options remove fewer pollutants and cost more than Option 2/6/10 and Option 4/8.

1. Water Quality Changes

EPA estimates that the proposed rule would substantially reduce pollutant discharges to the waters of the U.S. as shown by the loadings estimates in Table XIX-1 for five categories of pollutants. The regulation would result in total pollutant removals of 3,872 million pounds per year. These removals include a 30 million pound per-year reduction in eight sewage sludge contaminants and a 703 million pound per-year reduction in 89 pollutants causing inhibition of biological activity of sewage sludge. The regulation would reduce discharges of 35 HAPs by about one million pounds per-year. Discharges of pollutants that are known to be related to adverse acute and chronic effects on aquatic life would be reduced by 823 and 1,035 million pounds per year, respectively. These reductions result from increased wastewater treatment, pollution prevention, and regulatory closures. EPA estimated impacts of MP&M discharges on the quality of receiving waters using a model of the in-stream pollutant mixing and dilution process. A first order pollutant degradation model was used in the analysis of source water concentrations at the drinking water intake points. This model estimates in-stream concentrations for the initial discharge reach (*i.e.*, waterway) and for downstream reaches, taking into account dilution, adsorption, volatilization, and hydrolysis.

This analysis uses discharge information from 885 sample MP&M

facilities (excluding two sample facilities in Puerto Rico) that discharge directly or indirectly to 627 receiving waterways (544 rivers/streams, 55 bays/estuaries, and 28 lakes). Four of the 55 marine reaches were excluded from the in-stream water quality analysis due to data limitations.

EPA extrapolated the environmental assessment results for the sample facilities to the entire population of MP&M facilities nationwide. This extrapolation uses sample facility weights developed as part of the sampling plan. For additional information on sample weights see the Statistical Summary for the Metal Products & Machinery Industry Surveys in the Administrative record for today's rule.

EPA evaluated the national environmental impacts of reducing pollutant discharges from MP&M facilities to the nation's waterbodies for the proposed rule and for two alternative regulatory options. EPA considered only pollutant loadings from MP&M facilities to particular waterbodies and did not take background loadings from other sources into account, with one exception. The analysis of sewage sludge (biosolids) quality took background metal loadings into account. EPA used information from the POTW survey to estimate total metal loadings to a POTW of a given size (*i.e.*, small, medium, and large). See Section V.B for a description of the POTW survey. This estimate was based on the average number of small, medium, and large MP&M facilities discharging to a POTW in each size category and the percent contribution of

total metal loadings discharged from MP&M facilities.

2. Reduced POTW Impacts

EPA evaluated whether MP&M pollutants may interfere with publicly-owned treatment works (POTWs). Pollutants may impair POTW treatment effectiveness by inhibiting the biological activity of activated sludge. POTW inhibition and sludge values come from guidance published by EPA and other sources. The Agency also evaluated the reduced costs for managing and disposing of sewage sludge containing fewer pollutants or lower concentrations of pollutants. This is discussed in Section XX.D of today's proposal.

EPA estimated inhibition of POTW operations by comparing predicted POTW influent concentrations to available inhibition levels for 89 pollutants. At baseline discharge levels, EPA estimates that concentrations of 18 pollutants discharged from MP&M facilities exceed biological inhibition criteria at 515 POTWs nationwide. The proposed regulation would eliminate potential inhibition problems at 306 POTWs and reduce occurrence of pollutant concentrations in excess of inhibition criteria at 82 POTWs. POTWs may impose local limits to prevent inhibitions. If local limits are in place, the estimated reduction in potential inhibition problems at the affected POTWs is overstated. In this case, however, the estimated social cost of the MP&M regulation is also overstated.

3. Reduced Aquatic Life Impacts

EPA assessed the effect of baseline and post-compliance MP&M facility discharges on affected waterways by estimating the cases in which in-

waterway pollutant concentrations resulting from those discharges would exceed recommended acute and chronic Ambient Water Quality Criteria (AWQC) that protect aquatic life. Acute toxicity assesses the impacts of a pollutant from relatively short exposures, typically 48 and 96 hours for invertebrates and fish, respectively. Mortality is the endpoint of concern. Chronic toxicity assesses the impact of a pollutant after a longer exposure, typically from one week to several months. The endpoints of concern are one or more sublethal responses, such as changes in reproduction or growth in the affected organisms. Pollutant concentrations in excess of acute and chronic AWQC values indicate potential impacts to aquatic life.

The analysis compared baseline and post-compliance exceedences of aquatic life AWQC to determine the effects of the rule. These exceedences were modeled based on the estimated discharges from MP&M facilities and 7Q10 stream flow rates (7Q10 refers to the lowest consecutive seven day average with a recurrence interval of 10 years). Results show that baseline pollutant concentrations exceed acute AWQC in 878 reaches and chronic AWQC in 2,466 reaches nationally at baseline discharge levels. EPA estimates that the proposed option will eliminate concentrations in excess of acute and chronic criteria in 775 and 1,029 reaches, respectively. Results also show that an additional 903 receiving reaches will experience partial water quality improvements from reduced occurrence of some pollutant concentrations in excess of acute and/or chronic AWQC limits for protection of aquatic life.

TABLE XIX.1.—NATIONAL ESTIMATES OF MP&M FACILITY DISCHARGES

Category	MP&M discharges with potential POTW impacts			MP&M discharges exhibiting toxicity Aquatic Life	
	Activated sludge inhibition	Biosolids contaminants	HAP	Acute	Chronic
Baseline Loadings					
Number of Pollutants	89	8	35	107	116
Million lbs/yr	1,031	31.7	2.1	1,252	1,759
Remaining With the Proposed Option					
Million lbs/yr	328	1.61	1.11	430	723
Remaining With Option 2/6/10					
Million lbs/yr	266	0.54	0.89	364	647
Remaining With Option 4/8					
Million lbs/yr	484	0.43	1.05	595	895

TABLE XIX-2.—NATIONAL ESTIMATES OF MP&M POLLUTANTS, EXCEEDENCES & REDUCTIONS

	Baseline	Proposed option	Option 2/6/10	Option 4/8
POTW Impacts				
Number of POTWs with Inhibition Problems (18 pollutants > inhibition criteria)	515	209	123	123
Biosolids Contamination (8 pollutants):				
Number of POTWs	6,953	6,889	5,575	5,575
Non-qualifying Sewage Sludge (mill. of dry metric tons)	53.7	52.5	47.6	47.6
Receiving Water Impacts				
Number of Streams with Human Health AWQC Exceedences				
Number of pollutants:				
Water and organisms ^a	18	11	11	13
Organisms only ^b	6	5	5	5
Number of streams > AWQC for water and organisms	10,310	9,205	4,151	4,160
Number of streams > AWQC for organisms only	192	71	71	65
Number of Streams with Aquatic Life AWQC Exceedences				
Number of pollutants:				
Chronic	31	25	21	17
Acute	10	11	8	6
Number of streams > AWQC chronic	2,466	1,437	1,394	1,310
Number of streams > AWQC acute	878	103	61	52

^a Both drinking water and organism consumption are considered in developing these AWQC exceedences.

^b Only consumption of aquatic organisms is considered in these AWQC exceedences.

XX. Benefit Analysis

A. Overview of Benefits

This section presents EPA's estimates of the national environmental benefits of the proposed MP&M effluent guidelines. The benefits occur due to the reduction in facility discharges described in the preceding section. EPA's complete benefit assessment can be found in "Economic, Environmental, and Benefit Assessment of Proposed Metal Products and Machinery (MP&M) Rule."

Benefits analyses for past effluent guidelines have been limited in the range of benefits addressed, which has hindered EPA's ability to compare the benefits and costs of rules comprehensively. The Agency is working to improve its benefits analyses, including applying methodologies that have now become well established in the natural resources valuation field, but have not been used previously in the effluent guidelines program. EPA was particularly interested in expanding its benefits analyses for this rule to include water-based recreational activities other than fishing. The proposed MP&M rule addresses an industry with a large number of facilities located throughout the United States. These facilities are largely concentrated near large population centers and recreational sites.

Individuals in the U.S. are known to participate in a wide range of water-based recreational activities including fishing, swimming, boating, and near water activities such as wildlife viewing. Participation rates in each activity vary significantly from state to state depending on the availability and quality of water resources suitable for recreation, climate, and demographic characteristics of the user population. Wildlife viewing is most popular type of water-based recreation followed by fishing and swimming. The 1996 U.S. Fish and Wildlife Service survey showed that 62 million Americans enjoy wildlife viewing nationwide. In addition, 35 to 43 million people participate in recreational fishing and 34 million people take boating trips.

EPA has therefore expanded upon its traditional methodologies in the benefits analyses for the proposed MP&M rule. Past effluent guidelines analyses have included human health benefits, economic productivity benefits such as reduced costs for POTW sludge disposal, recreational benefits for fishing, and nonuse values. The additional analyses expands on the traditional analyses by estimating benefits to participants in boating, swimming and viewing (i.e., near-water recreation.) EPA used a benefit transfer approach based on four studies to estimate the increase in value to individuals who boat and participate in

viewing or near-water recreation at the national level. Three of these studies have been published in established economic journals, the other study is new and specific to the MP&M guideline. For this rule, EPA also conducted an original travel cost study in the State of Ohio, using the National Recreational Demand Survey (NDS) and a Random Utility Model (RUM) of recreational behavior, to estimate the changes in consumer valuation of water resources that would result from improvements in water quality. This study is presented in detail in Chapter 21 of the EEBA. A preliminary application of the travel cost study was reviewed by experts in the field of natural resource valuation, and the study has been presented at two professional meetings and will be subjected to a formal peer review in the coming year. The results of the previous review are available in the docket.

Because EPA has not yet resolved some anomalies in the extrapolation of these analyses to the national level, the monetized benefits for these new categories are not included in the summary statements of benefits for the proposed rule. EPA is including these analyses in the EEBA, however, to present the new methodologies and their results as applied to the MP&M rule for public comment, concurrent with seeking peer review of the travel cost study.

The new analyses projects benefits of \$500–\$900 million for enhanced wildlife viewing, \$265–\$672 million for recreational boating, and \$191 to \$1,066 million in additional non-use benefits (calculated as $\frac{1}{4}$ to $\frac{2}{3}$ of the additional recreational use benefits.) EPA notes that the methodology used results in projected benefits for 57 million wildlife viewers taking an average of 10 trips per year. This estimate (567 viewing days) is essentially the total number of single day trips as estimated by the national recreational demand survey (NDS). The methodology also predicts that 33 million individuals will each take an average 9 boating trips per year to sites benefiting from the rule. This amounts to 296 million boating days which is essentially all of the single day boating days nationally estimated from the NDS. Even though only about 5% of total reaches nationally are projected to benefit from the rule, 90% of the benefitting reaches are located in densely populated areas in the U.S., which is where the majority of the U.S.

population and recreational users are located, though not necessarily where they recreate. Although EPA is confident in the sample based results, EPA believes that the large numbers of viewers and boaters projected to benefit from the rule at the national level may indicate a need to revise its procedures for scaling up from sampled facilities to the national level. The simple extrapolation technique used in both the cost and benefit analyses, may have the unintended effect of overcounting the number of benefitting boaters and wildlife viewers. EPA is also specifically soliciting comment on several other methodological approaches used in new analyses including the benefits transfer of values from studies that did not specifically address boating and wildlife viewing to these activities, the extent to which activities such as recreational boating, and wildlife viewing are applicable to children, and the effect of omitting other non-MP&M sources of impairment on affected reaches from the analyses.

EPA may include additional categories of monetized benefits estimates based on these new methodologies, as revised based on comment and peer review, in its economic analyses of the final rule.

Table XX.1 summarizes the benefits categories associated with the regulation and notes which categories EPA was able to quantify and monetize. The benefits include three broad classes: Human health, ecological, and economic productivity benefits. Within these three broad classes, EPA was able to assess benefits with varying degrees of completeness and rigor. Where possible, EPA quantified the expected effects and estimated monetary values. Data limitations and limited understanding of how society values certain water quality changes prevented monetizing some benefit categories. This section also presents a case study for the State of Ohio which provides more detailed analyses of the regulation's expected benefits.

TABLE XX–1.—BENEFIT CATEGORIES ASSOCIATED WITH WATER QUALITY IMPROVEMENTS RESULTING FROM THE METAL PRODUCTS AND MACHINERY EFFLUENT GUIDELINE

Benefit category	Quantified and monetized	Quantified and nonmonetized	Nonquantified and nonmonetized
Human Health Benefits			
Reduced cancer risk due to ingestion of chemically-contaminated fish and unregulated pollutants in drinking water	X		
Reduced systemic health hazards (e.g., reproductive, immunological, neurological, circulatory, or respiratory toxicity) due to ingestion of chemically-contaminated fish and unregulated pollutants in drinking water		X	
Reduced systemic health hazards from exposure to lead from consumption of chemically-contaminated fish	X		
Reduced cancer risk and health hazards from exposure to unregulated pollutants in chemically-contaminated sewage sludge			X
Reduced health hazards from exposure to contaminants in waters used recreationally (e.g., swimming)			X
Ecological Benefits			
Reduced risk to aquatic life		X	
Enhanced water-based recreation including fishing	X		
Enhanced water-based recreation including near-water or viewing and boating	X		
Other enhanced water-based recreation such as swimming, waterskiing and white water rafting	In expanded analyses		X
Increased aesthetic benefits such as enhancement of adjoining site amenities (e.g. residing, working, traveling, and owning property near the water)			X
Nonuser value (i.e., existence, option, and bequest value)	X		X
Reduced contamination of sediments			X
Reduced non-point source nitrogen contamination of water if sewage sludge is used as a substitute for chemical fertilizer on agricultural land			X
Satisfaction of a public preference for beneficial use of sewage sludge *			X
Economic Productivity Benefits			
Reduced sewage sludge disposal costs	X		
Reduced management practice and record-keeping costs for users of sewage sludge that meets exceptional quality criteria			X
Reduced interference with POTW operations		X	
Benefits to tourism industries from increased participation in water-based recreation			X

TABLE XX-1.—BENEFIT CATEGORIES ASSOCIATED WITH WATER QUALITY IMPROVEMENTS RESULTING FROM THE METAL PRODUCTS AND MACHINERY EFFLUENT GUIDELINE—Continued

Benefit category	Quantified and monetized	Quantified and nonmonetized	Nonquantified and nonmonetized
Improved commercial fisheries yields	X
Addition of fertilizer to crops (nitrogen content of sewage sludge is available as a fertilizer when sludge is land applied) *	X
Improved crop yield (the organic matter in land-applied sewage sludge increases soil's water retention) *	X
Avoidance of costly siting processes for more controversial sewage sludge disposal methods (e.g., incinerators) because of greater use of land application	X
Reduced water treatment costs for municipal drinking water, irrigation water, and industrial process and cooling water	X

* Some of these benefit categories are accounted for and quantified under the "reduced sewage sludge disposal costs."

B. Reduced Human Health Risk

Reduced pollutant discharges from MP&M facilities generate human health benefits by a number of pathways. The most important human health benefits stem from reduced risk of illness from consumption of contaminated fish, aquatic organisms other than fish, and water. EPA analyzed human health benefits by estimating the change in the expected number of adverse human health events in the populations exposed to MP&M discharges. While some health effects such as cancer are relatively well understood and can be quantified and monetized in a benefits analyses, others such as systemic health effects are less well understood and may not be assessed with the same rigor or at all. (See Table XX-1.)

EPA analyzed the following measures of health-related benefits: reduced cancer risk from fish and water consumption; reduced risk of non-cancer toxic effects from fish and water consumption; lead-related health effects to children and adults; and reduced occurrence of in-waterway pollutant concentrations in excess of levels of concern. The levels of concern include human health-based ambient water quality criteria (AWQC) or documented toxic effect levels for those chemicals not covered by water quality criteria. The Agency monetized only two of these health benefits: (1) Changes in the incidence of cancer from fish and water consumption, and (2) changes in adverse health effects to children and adults from reduced lead exposure. The following discussion includes results only for the proposed option; however, the tables present the results for all options evaluated.

EPA estimates that the proposed option would eliminate approximately 2.29 cancer cases associated with consumption of MP&M pollutants in fish tissue and drinking water. The regulation would also result in the

removal of 0.86 million pounds (1.9 toxic lb-eq.) per year of lead. In addition, there will be a 142 million pound reduction in 77 pollutants that are known to be related to a wide range of human health endpoints not quantified or monetized for this benefits analyses. Monetized health benefits are expected to result in \$41.3 million (1999 \$) in benefits due to decreased human health risks under the proposed option.

The analyses of changes in human health risk described in this and the following sections ignore the potential for joint effects of more than one pollutant. Each pollutant is dealt with in isolation and the individual effects are summed. Therefore, this approach does not account for the possibility that several pollutants may combine in a synergistic fashion to yield more or less adverse effects to human health than indicated by the simple sum of their individual effects.

1. Benefits from Reduced Incidence of Cancer Cases

EPA estimated aggregate cancer risk from contaminated drinking water for populations served by drinking water intakes on waterbodies to which MP&M facilities discharge. This analyses is based on seven carcinogenic pollutants for which no published drinking water criteria are currently available. This analyses excludes six carcinogens for which drinking water criteria are available. EPA assumed that public drinking water treatment systems will remove these pollutants from the public water supply. To the extent that treatment for these six pollutants may cause incidental removals of the chemicals without criteria, the analyses may overstate cancer related benefits.

Calculated in-stream concentrations serve as a basis for estimating changes in cancer risk for populations served by affected drinking water intakes. EPA estimates that the proposed regulation would eliminate annually 2.24 cancer

cases associated with consumption of contaminated drinking water, or 44 percent of the cancer cases associated with baseline MP&M discharges.

EPA valued the reduced cancer cases using estimated willingness-to-pay values for avoiding premature mortality. The values used in this analyses are based on a range of values identified in the EPA Office of Policy Analysis' review of available studies. The mean value of avoiding one statistical death is estimated to be \$5.8 million. This estimate does not include estimates of morbidity prior to death.

EPA also estimated aggregate cancer risk from consuming contaminated fish for recreational and subsistence anglers and their families. This analyses is based on thirteen carcinogenic pollutants found in MP&M effluent discharges. Estimated contaminants in fish tissue reflect predicted in-stream pollutant concentrations and biological uptake factors. EPA used data on numbers of licensed fishermen by State and county, presence of fish consumption advisories, fishing activity rates, and average household size to estimate the affected population of recreational and subsistence anglers and their families. The analyses uses different fish consumption rates for recreational and subsistence anglers to estimate the change in cancer risk among these populations.

The proposed rule eliminates an estimated 0.05 cancer cases per year for combined recreational and subsistence angler populations, representing a reduction of about 36 percent from a baseline of about 0.13 cases. This translates into \$0.3 million (1999\$) in annual benefits due to reduced cancer risk from consumption of contaminated fish by these populations.

Total benefits from reduced incidence of cancer cases, including both drinking water and fish exposures are \$13.3 million (1999\$) annually (see Table XX-2).

TABLE XX-2.—ESTIMATED ANNUAL BENEFITS FROM AVOIDED CANCER CASES FROM FISH AND DRINKING WATER CONSUMPTION

Regulatory status	Drinking Water		Fish Consumption		Total	
	Annual cancer cases	Benefit value (million 1999\$)	Annual cancer cases	Benefit value (million 1999\$)	Annual cancer cases	Benefit value (million 1999\$)
Baseline						
Baseline	5.10	¹ N/A	0.126	N/A	5.23	N/A
Proposed Option						
Number of Cases/Value	2.86	\$13.0	0.081	\$0.3	2.94	\$13.3
Percent Reduction	43.9%	N/A	35.7%	N/A	43.9%	N/A
Option 2/6/10						
Number of Cases/Value	2.73	\$13.7	0.081	\$0.3	2.81	\$14.0
Percent Reduction	46.5%	N/A	35.7%	N/A	46.1%	N/A
Option 4/8						
Number of Cases/Value	2.73	\$13.8	0.062	\$0.4	2.79	\$14.2
Percent Reduction	46.5%	N/A	49.2%	N/A	46.5%	N/A

Source: U.S. Environmental Protection Agency.

¹ Not Applicable.

2. Reductions in Systemic Health Effects

EPA expects that the proposed rule would also generate a wide range of non-cancer health benefits (*e.g.*, systemic effects, reproductive toxicity, and developmental toxicity) from reduced contamination of fish tissue and drinking water sources. The change in exposure to pollutants through fish and water consumption relative to pollutant-specific health effects thresholds yields an additional measure of the human health benefits that are likely to result from the proposed regulation. EPA compared estimated in-stream pollutant concentrations for 77 systemic toxicants with risk reference doses to calculate a hazard score. The systemic hazard score is the sum of the ratios of pollutant quantities ingested to the daily reference dose for each pollutant. Values above or near one indicate the potential for health non-cancer hazards. The hazard score assumes that the combined effect of ingesting multiple pollutants is proportional to the sum of their effects individually.

The distribution of hazard scores was calculated for drinking water and fish consumption populations for baseline and post-compliance exposures. The results show movement in populations from higher risk values to lower risk values for both the fish and drinking water analyses. Substantial increases in the percentage of the exposed populations that would be exposed to

no risk of systemic health hazards occur in both analyses.

3. Benefits from Reduced Exposure to Lead

EPA performed a separate analyses of benefits from reduced exposure to lead. This analyses differs from the analyses of systemic health risk from exposure to other MP&M pollutants because it is based on dose-response functions tied to specific health endpoints to which monetary values can be applied.

Many lead-related adverse health effects are relatively common and are chronic in nature. These effects include but are not limited to hypertension, coronary heart disease, and impaired cognitive function. Lead is harmful to any exposed individual, and the effects of lead on children are of particular concern. Children's rapid rate of development makes them more susceptible to neurobehavioral deficits resulting from lead exposure. The neurobehavioral effects on children from lead exposure include hyperactivity, behavioral and attention difficulties, delayed mental development, and motor and perceptual skill deficits.

This analyses assessed benefits of reduced lead exposure from consumption of contaminated fish tissue to three sensitive populations: (1) Preschool age children, (2) pregnant women, and (3) adult men and women. This analyses uses blood-lead levels as a biomarker of lead exposure. EPA

estimated baseline and post-compliance blood lead levels in the exposed populations and then used changes in these levels to estimate benefits in the form of avoided health damages.

EPA assessed neurobehavioral effects on children based on a dose-response relationship for IQ decrements. Avoided neurological and cognitive damages are expressed as changes in overall IQ levels, including reduced incidence of extremely low IQ scores (<70, or two standard deviations below the mean) and reduced incidence of blood-lead levels above 20 mg/dL. The analyses uses the value of compensatory education that an individual would otherwise need and the impact an additional IQ point on individuals' future earnings to value the avoided neurological and cognitive damages. EPA estimated that implementation of the proposed rule would result in avoided IQ loss of 489 points across all exposed children. The estimated monetary value of avoided IQ loss is \$4.9 million (1999\$). In addition, reduced occurrences of extremely low IQ scores (<70) and reduced incidence of blood-lead levels above 20 mg/dL would result in a decrease in the annual cost of compensatory education for children with learning disabilities of \$0.1 million (1999\$).

Prenatal exposure to lead is an important route of exposure. Fetal exposure to lead in utero due to maternal blood-lead levels may result in several adverse health effects, including

decreased gestational age, reduced birth weight, late fetal death, neurobehavioral deficits in infants, and increased infant mortality. To assess benefits to pregnant women, EPA estimated changes in the risk of infant mortality due to changes in maternal blood-lead levels during pregnancy. This analyses used the estimated willingness-to-pay (WTP) to avoid a mortality to estimate the monetary benefit associated with reducing risks of neonatal mortality. The estimated monetary value of benefits from reduced neonatal mortality is \$9.33 million (1999\$).

Lead exposure has been shown to have adverse effects on the health of adults as well as children. The health effects in adults that EPA was able to quantify all relate to lead's effects on blood pressure. Quantified health effects include increased incidence of hypertension (estimated for males only), initial coronary heart disease (CHD), strokes (initial cerebrovascular accidents and atherothrombotic brain infarctions), and premature mortality. This analyses does not include other health effects associated with elevated blood pressure, and other adult health effects of lead including nervous system

disorders in adults, anemia, and possible cancer effects. EPA used cost of illness estimates (*i.e.*, medical costs and lost work time) to estimate monetary value of reduced incidence of hypertension, initial CHD, and strokes. EPA then used the value of a statistical life saved to estimate changes in risk of premature mortality. The estimated monetary value of health benefits to adults is \$13.6 million (1999\$) (see Table XX-3).

Total benefits from reduced exposure to lead, including both children and adults are \$28.0 million (1999\$) annually under the proposed option.

TABLE XX-3.—NATIONAL ADULT LEAD BENEFITS
[Millions of 1999\$ per year]

Category	Proposed option		Option 2/6/10		Option 4/8	
	Reduced cases	Monetary value	Reduced cases	Monetary value	Reduced Cases	Monetary value
Men						
Hypertension	959.85	\$1.00	991.41	\$1.04	992.20	\$1.04
CHD	1.24	\$0.09	1.29	\$0.09	1.29	\$0.09
CBA	0.52	\$0.14	0.53	\$0.14	0.53	\$0.14
BI	0.29	\$0.08	0.30	\$0.08	0.30	\$0.08
Mortality	1.7	\$9.85	1.76	\$10.19	1.76	\$10.20
Women						
CHD	0.39	\$0.03	0.40	\$0.03	0.40	\$0.03
CBA	0.17	\$0.03	0.18	\$0.04	0.18	\$0.04
BI	0.10	\$0.02	0.11	\$0.02	0.11	\$0.02
Mortality	0.41	\$2.38	0.42	\$2.46	0.42	\$2.46
Total Benefits .....	.....	\$13.6	.....	\$14.08	.....	\$14.09

National Level Exposed Population:

(1) Hypertension: 428,363 men ages 20 to 74;

(2) Coronary heart disease, cerebrovascular accidents, brain infarction, and mortality: 173,386 men and 192,091 women ages 45–74.

4. Exceedences of Health-Based AWQC

EPA also estimated the effect of MP&M facility discharges by comparing pollutant concentrations in affected waterways to ambient water criteria for protection of human health. This analysis compares the estimated baseline and post-compliance in-stream pollutant concentrations with ambient water quality criteria (AWQC). The comparison included AWQC for protection of human health through consumption of organisms and for consumption of organisms and water. Pollutant concentrations in excess of these values indicate potential risks to human health. EPA modeling results show that baseline in-stream concentrations of 18 pollutants are estimated to exceed human health criteria for consumption of water and organisms in 10,310 receiving reaches nationwide. The proposed rule

eliminates concentrations in excess of the criteria for consumption of water and organisms on 1,105 of these reaches. EPA also estimates that the proposed rule eliminates the occurrence of concentrations in excess of human health criteria for consumption of organisms only on 121 of the 192 reaches on which baseline discharges are estimated to cause concentrations in excess of AWQC values. Results also show that 382 receiving reaches will experience partial water quality improvements from reduced occurrence of some pollutant concentrations in excess of AWQC limits for consumption of water and organisms.

C. Ecological, Recreational and Nonuser Benefits

EPA expects the proposed regulation to provide ecological benefits by improving the habitats or ecosystems (aquatic and terrestrial) affected by the

MP&M industry's effluent discharges. Benefits associated with changes in aquatic life include: restoration of sensitive species; Recovery of diseased species; changes in taste- and odor-producing algae; changes in dissolved oxygen (DO); increased assimilative capacity of affected waterways; and improved related recreational activities. These activities include swimming, fishing, boating and wildlife observation that may be enhanced when risks to aquatic life are reduced. Among these ecological benefits, EPA was able to estimate dollar values for improved recreational opportunities and for nonuser benefits.

EPA expects the MP&M rule to improve aquatic species habitats by reducing concentrations of toxic and conventional contaminants in water. These improvements should enhance the quality and value of water-based recreation, such as fishing, swimming,

wildlife viewing, camping, waterfowl hunting, and boating. The benefits from improved water-based recreation would be seen as increases in the increased value participants derive from a day of recreation or the increased number of days that consumers of water-based recreation choose to visit the cleaner waterways. This analysis measures the economic benefit to society from water quality improvements based on the increased monetary value of recreational

opportunities resulting from those improvements.

EPA assessed recreational benefits of reduced occurrence of pollutant concentrations exceeding aquatic life and/or human health AWQC values. This analysis combined the findings from the aquatic life benefits analysis and the human health AWQC exceedence analysis described previously. These analyses found that 10,443 stream reaches exceed chronic or acute aquatic life AWQC and/or human

health AWQC values at the baseline discharge levels (see Table XIII-4). The proposed rule is expected to eliminate exceedences on 1,185 of these discharge reaches, leaving 9,258 reaches with concentrations of one or more pollutants that exceed AWQC limits. Of these 9,258 reaches, 1,837 reaches will experience partial water quality improvements from reduced occurrence of some pollutant concentrations in excess of AWQC limits.

TABLE XX-4.—ESTIMATED MP&M DISCHARGE REACHES WITH MP&M POLLUTANT CONCENTRATIONS IN EXCESS OF AWQC LIMITS FOR PROTECTION OF HUMAN HEALTH OR AQUATIC SPECIES

Regulatory status	Number of reaches with MP&M pollutant concentrations exceeding AWQC limits	Number of benefitting reaches	
		All AWQC exceedences eliminated	Number of AWQC exceedences reduced
Baseline	10,443	.....	.....
Proposed option	9,258	1,185	1,837
Option 2/6/10	4,217	6,226	1,894
Option 4/8	4,226	6,217	1,866

EPA attached a monetary value to these reduced exceedences based on increased values for recreational fishing and for nonuser values. Since the benefitting reaches are close to densely populated areas potential recreational users may also benefit from reduced visit "price" to these sites (i.e., lower travel costs to good recreational sites). EPA applied a benefits transfer approach to estimate the total willingness to pay (WTP), including both use and non-use values, for improvements in surface water quality. This approach builds upon a review and analysis of the surface water valuation literature.

EPA first estimated the baseline value of water-based recreation for the benefitting reaches based on estimated annual person-days of recreational fishing. The baseline per-day values of water-based recreation are based on studies by Walsh et al. (1992) and Bergstrom and Cordell (1991). The studies provide values per recreation day for a wide range of water-based activities, including fishing, boating, wildlife viewing, waterfowl hunting, camping, and picnicking. The mean value per recreational fishing day used in this analyses is \$39.62.

EPA then applied the percentage change in the recreational fishing value of water resources implied by surface water valuation studies to estimate changes in values for all MP&M reaches in which the regulation eliminates AWQC exceedences by one or more

MP&M pollutants. The Agency selected eight of the most comparable studies and calculated the changes in recreational fishing values from water quality improvements (as percentage of the baseline) implied by those studies. Sources of estimates included Lyke (1993), Jakus et al. (1997), Montgomery and Needleman (1997), Paneuf et al. (1998), Desvousges et al. (1987), Lant and Roberts (1990), Farber and Griner (2000), and Tudor et al. (2000). EPA took a simple mean of point estimates from all applicable studies to derive a central tendency value for percentage change in the water resource values due to water quality improvements.

This approach uses all possible applicable valuation studies, makes unit values more likely to be nationally representative, and avoids the potential bias inherent in using a single study to make estimates at the national level. These studies yielded estimates of increased recreational fishing value from water quality improvements expected from reduced MP&M discharges of 10 to 15 percent. The estimated national recreational benefits of the proposed rule (1999\$) are provided in Table XIII-5 below. Note that the benefits transfer approach used in this analyses is based on eight studies as opposed to one used in the previous rule.

The resulting average changes in participants' valuation of water resources *per year* resulting from the MP&M rule is modest (\$18.12 per angler

per year). EPA applied these estimates to the portion of the population residing in each county that is traversed by (i.e., is adjacent to) a water body that benefits from the proposed MP&M rule. The portion of the anglers adjacent to the reach is calculated based on the number of fishing licenses sold in the relevant counties and the ratio of the benefitting reach length to the number of total reach miles in the county. The results were then extrapolated to the national level based on facility sample weights.

Removing water quality impairments would increase services provided by water resources to recreational users. Potential recreational users are expected to benefit from improved recreational opportunities, including an increased number of available choices of recreational sites. For example, some of the streams that were not usable for recreation under the baseline discharge conditions may be newly included in the site choice set for recreational users from nearby counties. Streams that have been used for recreation under the baseline conditions can become more attractive for users making recreational trips more enjoyable. Individuals may also take trips more frequently if they enjoy their recreational activities more.

EPA estimated that 20.2 million anglers will benefit from improved recreational opportunities because they live in counties that are traversed by reaches expected to benefit from the MP&M regulation. The results show that roughly half of the nation's recreational

anglers will benefit from the proposed rule. These results partially stem from the concentration of MP&M facilities in all heavily populated areas. However, EPA recognizes that extrapolating from sample facility to national results introduces uncertainty in the analyses, and is continuing to explore ways to reduce this uncertainty. The Agency is requesting comment on the methods used to extrapolate sample results to

national benefit estimates. The extrapolation method used is described in detail in chapters 5 and 15 and appendix F of the EEBA.

EPA also estimated non-market nonuser benefits. These non-market nonuser benefits are not associated with current use of the affected ecosystem or habitat; instead, they arise from the value society places on improved water quality independent of planned uses or

based on expected future use. Past studies have shown that nonuser values are a sizable component of the total economic value of water resources. EPA estimated average changes in nonuser value to equal one-half of the recreational fishing benefits. The estimated increase in nonuser value is \$182.7 million (1999\$).

TABLE XX-5.—ESTIMATED RECREATIONAL FISHING AND NON-USE BENEFITS FROM REDUCED MP&M DISCHARGES
[Million 1999\$]

Benefit Type	Proposed option	Option 2/6/10	Option 4/8
Recreational Fishing	\$365.4	\$960.3	\$962.1
Nonuse Benefit (1/2 of Recreational Fishing)	182.7	480.2	481.1
Total Recreational Benefits	548.1	1,440.5	1,443.2

Note: Categories may not sum to totals due to rounding of individual estimates for presentation purposes.

EPA calculated the total value of enhanced water-based recreation opportunities by summing recreational fishing and nonuser value. The resulting increase in value of water resources to recreational anglers and nonusers is \$548.1 million, with an upper and lower bound range of \$294 to \$941 million (1999\$) annually.

D. Productivity Changes: Cleaner Sewage Sludge (Biosolids)

EPA evaluated two productivity measures associated with MP&M pollutants. The first measure was the pollutant interference at publicly-owned treatment works (POTWs) which were quantified but not monetized in Section XII. The second measure is pass-through of pollutants into the sludge which limits options for disposing of their sewage sludge. EPA quantified the reduced costs for managing and disposing of sewage sludge. This analyses relied on data from 147 POTW surveys. The survey provided information on sewage sludge use and disposal costs and practices, total metal loadings to the POTW, percentage of total metal loadings contributed by MP&M facilities, and the number of known MP&M dischargers to the POTW. The survey also provided information on the percentage of qualifying sludge that is not land applied and reasons for not land applying qualifying sludge.

EPA has promulgated regulations establishing standards for sewage sludge when it is applied to the land, disposed of at dedicated sites (surface disposal), and incinerated (40 CFR part 503). In addition, EPA has also established standards for sewage sludge when it is disposed of in municipal solid waste

landfills (40 CFR part 258). Disposing of sewage sludge containing lower levels of pollutants is less expensive than disposing of more contaminated sewage because these regulations restrict disposal options based on sludge pollutant levels. The POTW survey indicated that the costs of alternative use/disposal practices follow a consistent ordinal relationship. That is, certain use/disposal practices (*e.g.*, incinerating sludge) are generally more expensive than other practices (*e.g.*, land application).

EPA estimated baseline and post-compliance sludge concentrations of eight metals for POTWs receiving discharges from the sample MP&M facilities. EPA compared these concentrations with the relevant metal concentration limits for land application and surface disposal. In the baseline case, EPA estimated that concentrations of one or more metals at 6,953 POTWs would fail the land application limits.

EPA estimates that 62 POTWs will be able to select the lower-cost land application disposal based on estimated reductions in sludge contamination. An estimated 1.7 million dry metric tons (DMT) of sewage sludge would newly qualify for land application annually. EPA also estimated that 21 POTWs that previously met only the land application pollutant limit would, as a result of regulation, meet the more stringent land application concentration limits. EPA expects these POTWs to benefit through reduced record-keeping requirements and exemption from certain sludge management practices. The annual estimated cost savings for the POTWs expected to upgrade their

sludge disposal practices are \$61.3 million (1999\$).

This analyses includes an adjustment to the estimate of national sludge use/disposal cost benefits for POTWs located at cost-prohibitive distances from agricultural, forest, or disturbed lands suitable for sludge application. EPA assumed that 46 percent of sludge generated in the United States is generated by POTWs located too far from sites suitable for application sewage sludge to make these practices economical.

E. Total Estimated Benefits of the Proposed MP&M Rule

EPA estimates that total benefits for the five categories for which monetary estimates were possible are \$0.651 billion (1999\$) annually. EPA characterized uncertainty inherent in the benefits analyses by bounding benefit estimates. The low and upper bound benefit estimates of the proposed option are \$0.347 and \$1,144 billion (1999\$) annually. EPA's complete benefit assessment can be found in Economic, Environmental, and Benefit Assessment of Proposed Effluent Limitations and Guidelines for the Metal Products and Machinery Industry. The monetized benefits of the rule underestimate the total benefits of the rule because it omits various sources of benefits to society may from reduced MP&M effluent discharges. Examples of benefit categories not reflected in this estimate include: non-cancer health benefits other than benefits from reduced exposure to lead, other water dependent recreational benefits such as swimming, boating, wildlife viewing, and waterskiing, and reduced cost of

drinking water treatment for the pollutants with drinking water criteria.

TABLE XX-6.—ESTIMATED BENEFITS FROM REDUCED MP&M DISCHARGES
[Annual Benefits—Million 1999\$]

Benefit category	Proposed option	Option 2/6/10	Option 4/8
1. Reduced Cancer Risk:			
Fish Consumption	\$0.3	\$0.3	\$0.4
Water Consumption	13.0	13.7	13.8
2. Reduced Risk from Exposure to Lead:			
Children	14.4	14.8	14.9
Adults	13.6	14.1	14.1
3. Avoided Sewage Sludge Disposal Costs	61.3	68.5	127.4
4. Enhanced Fishing	365.4	960.7	962.7
5. Nonuse benefits (½ of Recreational Use Benefits)	182.7	480.4	481.3
Total Monetized Benefits	650.6	1,553.5	1,614.4

As previously mentioned, the EEBA includes national estimates for benefits in two other categories, enhanced boating and wildlife viewing. In addition, it also includes estimates from a travel cost analyses of recreational benefits from enhanced fishing, swimming, boating and wildlife viewing performed for the state of Ohio. The case study analyses supplements the national level analyses performed for the proposed MP&M regulation by using improved data and methods to determine MP&M pollutant discharges from both MP&M facilities and other sources and by estimating swimming, fishing, boating, and near-water activities. The random utility model (RUM) used in the analyses estimates the effects of the specific water quality characteristics analyzed for the proposed MP&M regulation (i.e., the presence of AWQC exceedances and concentrations of the nonconventional nutrient Total Kjeldahl Nitrogen.) The direct link between the water quality characteristics analyzed for the rule and the characteristics valued in the RUM analyses reduces uncertainty in benefit estimates and makes the analyses of recreational benefits more robust. This analyses is presented in Chapters 20, 21, and 22 of the EEBA.

F. Benefit-Cost Comparison

EPA cannot perform a complete benefit-cost comparison because not all of the benefits resulting from the proposed regulatory alternative can be valued in dollar terms. A comparison of costs and benefits is thus limited by the lack of a comprehensive benefits valuation and also by some uncertainties in the estimates. Nonetheless, EPA presents the following summary comparison of costs and benefits for the proposed rule. The social cost of the proposed rule is \$2.1

billion annually (1999\$). The total benefits that can be valued in dollar terms in the categories traditionally analyzed for effluent guidelines range from \$0.4 billion to \$1.1 billion annually (1999\$). EPA believes that the benefits of the proposed regulation justify the social costs.

XXI. Regulatory Implementation

A. Compliance Dates

As discussed in Section XII of this notice, EPA is proposing to establish a three-year deadline (from the date of publication of the final MP&M rule) for compliance with the MP&M pretreatment standards for existing sources (PSES). EPA is proposing a three-year deadline because design and construction of systems adequate for compliance with PSES will be a substantial undertaking for many MP&M sites. In addition, control authorities (e.g., POTWs) will need the time to develop the permits or other control mechanisms for their industrial users.

Once EPA finalizes the MP&M rule, these limitations will be reflected in NPDES permits issued to direct dischargers.

New sources must comply with the new source standards and limitations (PSNS and NSPS) of the MP&M rule (once it is finalized) at the time they commence discharging MP&M process wastewater. Because the final rule is not expected within 120 days of the proposed rule, the Agency considers a discharger a new source if its construction commences following promulgation of the final rule (40 CFR 122.2; 40 CFR 403.3). In addition, today's notice fully replaces the MP&M Phase I proposal, published on May 30, 1995. Therefore, compliance deadlines in that proposal would obviously no longer apply.

B. Implementation of Limitations and Standards

1. Concentration-Based Limitations and Standards

As discussed in Section II.D, EPA is proposing concentration-based limits for all subcategories except the Steel Forming & Finishing Subcategory for which EPA is proposing production-based limits (see Section XXI.B.2, below, for a discussion on the Steel Forming & Finishing Subcategory). Unlike the Phase I proposal, EPA is not proposing to require permit writers or control authorities (e.g., POTWs) to implement the limits on a mass basis for dischargers. Instead EPA is proposing to authorize permit writers and control authorities to use their best professional judgement to decide when it is most appropriate to implement mass-based limits. The NPDES regulations (40 CFR 122.45(f)) require permit writers to implement mass-based limitations for direct dischargers, but allows an exception when the limits are expressed in terms of other units of measurement (e.g., concentration) and the General Pretreatment Standards (40 CFR 403.6(d)) provides that the control authority may impose mass limitations on industrial users which are using dilution to meet applicable pretreatment requirements or where mass limitations are appropriate. EPA believes that this approach will reduce implementation burden on POTWs associated with implementing mass-based limits at all of their MP&M industrial users, but will still result in increased use of water conservation practices at the facilities where POTWs determine it is most appropriate. EPA believes that MP&M facilities that have been using the best pollution prevention and water conservation practices may also request that the permit writer or POTW use

mass-based limits in their permits or control mechanism. The Agency is providing detailed information on water use levels for specific unit operations in Section 15 of the Technical Development Document for today's proposal. EPA believes this information will be useful to permit writers and control authorities in those instances where they deem it appropriate to set mass-based limits.

2. Mass-Based Limitations and Standards

a. Background

The effluent limitations guidelines and standards for BPT, BAT, NSPS, PSES, and PSNS proposed today for the Steel Forming and Finishing Subcategory are expressed as mass limitations in pounds/1,000 pounds of product. The mass limitation is derived by multiplying an effluent concentration (determined from the analyses of treatment system performance) by an appropriate wastewater volume ("production-normalized flow") determined for each forming or finishing operation expressed in gallons/ton of product. EPA developed the production normalized flows used to develop the limits in the proposed rule from survey questionnaire responses from steel forming and finishing facilities. (The production-normalized flows are provided in the Technical Development Document.) However, EPA did not collect analytical wastewater samples from Steel Forming & Finishing facilities that used the Option 2 treatment technology (see Section VIII for a description of the technology options). EPA transferred the effluent concentrations used to develop the proposed Steel Forming & Finishing subcategory limitations and standards from those used for the General Metals subcategory. EPA believes that the wastewater characteristics of the General Metals subcategory closely resemble those of the Steel Forming & Finishing subcategory. The concentration-based limitations and standards for the General Metals subcategory are provided in Subpart A of the proposed codified regulation that accompanies this preamble. EPA will conduct analytical wastewater sampling of well-operated chemical precipitation and clarification systems at steel forming and finishing facilities post-proposal. EPA intends on developing limitations and standards for this subcategory for the final rule that would be based on the steel forming and finishing facilities in this subcategory.

A facility subject to today's proposed regulation can use a combination of

various treatment alternatives and/or water conservation practices to achieve a particular effluent limitation or standard. The model treatment systems (*i.e.*, Option 2 for BPT, BAT, BCT, and PSES and Option 4 for NSPS and PSNS, as described in Section VIII) illustrate at least one means available to achieve the proposed effluent limitations guidelines and standards.

As discussed above in Section XXI.B.1, both the NPDES permit regulations and the General Pretreatment Regulations discuss the use of mass-based limitations and standards. In order to convert the proposed effluent limitations and standards expressed as pounds/1,000 pounds of product to a monthly average or daily maximum permit limit, the permitting or control authority would use a production rate with units of tons/day. The NPDES permit regulations (Part 122.45(b)(2)) require that NPDES permit limits be based on a "reasonable measure of actual production." A similar requirement is found in the General Pretreatment regulations (40 CFR 403.6(c)(3)). As discussed in Section VI, facilities in the proposed MP&M Steel Forming & Finishing subcategory, are currently covered under the Iron & Steel Manufacturing Point Source Category regulations (40 CFR part 420). The production rates used for NPDES permitting for the iron and steel industry under 40 CFR part 420 have commonly been the highest annual average production from the prior five year period prorated to a daily basis, or the highest monthly production over the prior five years prorated to a daily basis. Stakeholders involved in EPA's proposed revision of the Iron and Steel effluent limitations guidelines and standards (which is being proposed under a separate notice) have indicated that (1) EPA should include the method used to determine appropriate production rates for calculating allowable mass loadings into the regulation for consistency, so that the permit writers can all use the same basis; and (2) EPA should use a high production basis, such as maximum monthly production over the previous five year period or maximum design production, in order to ensure that a facility will not be out of compliance during periods of high production.

Both the NPDES and General Pretreatment regulations require that, for existing sources, production-based effluent limitations guidelines and standards be based not on production capacity, but on a "reasonable measure of actual production." The current iron and steel regulation at 40 CFR 420.04

requires that the mass-based pretreatment requirements be based on a reasonable measure of actual production. That regulation provides two examples of what may constitute a reasonable measure of actual production: (1) the monthly average for the highest of the previous five years, or (2) the high month of the previous year. Both values are converted to a daily basis (*i.e.*, tons/day) for purposes of calculating monthly average and daily maximum mass-based permit effluent limitations.

Each of the above regulations requires that effluent limitations and pretreatment standards for new sources must be based on projected production. That approach is carried forward in this proposed regulation.

EPA believes that production rates used in some permits and control mechanisms have been derived in a manner that is not consistent with the term "reasonable measure of actual production" specified at 40 CFR 122.45(b)(2)(i), 403.6(c)(3), and 420.04. In some cases, maximum production rates for similar process units discharging to one treatment system were determined from different years or months, which may provide an unrealistically high measure of actual production. In EPA's view, this unrealistic estimate of production would occur if the different process units could not reasonably produce at these high rates simultaneously.

The ideal situation for the application of production-based effluent limitations and standards is where production is relatively constant from day-to-day or month-to-month. In this case, the production rate used for purposes of calculating the permit limitations would then be the average rate. However, in the case of the steel forming and finishing industry, production rates are not constant and vary significantly based on factors such as fluctuations in market demand for domestic products, maintenance, product changes, equipment failures, and facility modifications. As such, the typical production rate for individual facilities vary significantly over time, especially over the customary five-year life of a permit or control mechanism.

Although permits and control mechanisms can be modified, if necessary, during the five-year life of a permit or control mechanism, re-opening a permit can be very burdensome on the regulator and the facility. Therefore, the objective in determining a production estimate for a facility is to develop a reasonable measure of production which can reasonably be expected to prevail during

the next term of the permit or control mechanism. The production estimate is used in combination with the production-based limitations to establish a maximum mass of pollutant that may be discharged each day and month. However, if the permit or control mechanism production rate is based on the maximum month, then the permit could allow excessive discharges of pollutants during significant portions of the life of the permit/control mechanism. These excessive allowances may discourage facilities from ensuring optimal waste management, water conservation, and wastewater treatment practices during lower production periods. On the other hand, if the average production rate is based on an average derived from the highest year of production over the past five years, then facilities may have trouble ensuring that their waste management, water conservation, and wastewater treatment practices can accommodate shorter periods of higher production. This might require facilities to target a more stringent treatment level than that on which the limits and standards were based during these periods of high production. To accomplish this, facilities would likely have to develop more efficient treatment systems, greater hydraulic surge capacity, and better water conservation and waste management practices, or they may have to contract haul a portion of their wastewater to off-site disposal during these periods.

b. Alternatives for Establishing Permit Effluent Limitations and Standards

EPA is soliciting comment on several alternative approaches that may result in more stringent mass-based permits/control mechanisms for some facilities with better protection of the environment for the entire life of a permit/control mechanism and may result in higher costs. Each alternative requires that production from unit operations that do not generate or discharge process wastewater shall not be included in the calculation of operating rates.

Alternative A: This is the basis for today's proposed limits. It retains the essential requirements of the rule that EPA currently regulates Steel Forming and Finishing facilities under (40 CFR 420.04). However, today's proposal provides additional instructions for avoiding approaches that result in unrealistically high estimates of actual production by only considering production from all production units that could occur simultaneously (see § 438.58(b)). This may result in higher costs for those facilities with current

permit or control mechanism conditions based on production levels that are higher than levels that could occur simultaneously at multiple process units.

In determining the production rate for the Steel Forming and Finishing subcategory, EPA is proposing to require permit writers and control authorities to use the following protocols:

(1) For similar, multiple production lines with process waters treated in the same wastewater treatment system, the reasonable measure of production shall be determined from the combined production of the similar production lines during the same time period.

(2) For process wastewater treatment systems where wastewater from two or more different production lines are commingled in the same wastewater treatment system, the reasonable measure of production shall be determined separately for each production line (or combination of similar production lines) during the same time period.

Alternative B: The Agency is considering including in the rule a requirement for the permit writer/control authority to establish multi-tiered limits and pretreatment standards. Permit writers and control authorities currently use their best professional judgment for establishing multi-tiered permits. The Agency has issued guidance for use in considering multi-tiered permits (see chapter 5 of the "U.S. EPA NPDES Permit Writers" Manual," (EPA-833-8-96-003, December 1996) and chapter 7 of the "Industrial User Permitting Guidance Manual," (EPA 833/R-89-001, September 29, 1989)).

In situations where a single set of effluent limitations or standards are not appropriate for the permit's (or control mechanism's) entire period, a tiered permit/control mechanism may be established. One set of limits would apply for periods of average production along with other sets which take effect when there are significant changes in the average production rate. The guidance notes that a 10 to 15 percent deviation above or below the long-term average production rate is within the range of normal variability. Predictable changes in the long-term production higher than this range would warrant consideration of a tiered or multi-tiered permit/control mechanism. Based on EPA's limited data, the facilities in the Steel Forming and Finishing subcategory may have a variable production rate where the permit/control mechanism modification process is not fast enough to respond to

the need for higher or lower equivalent limits.

Alternative C: To provide a basis for deriving a permit/control mechanism production rate that is consistent with the term *reasonable measure of actual production* and that can be applied consistently for facilities in the Steel Forming and Finishing subcategory, EPA is also considering including a definition of "production" specific to this subcategory in the rule. The modified definition for use in developing the permit/control mechanism production basis would be the average daily operating rate for the year with the highest annual production over the past five years, taking into account the annual hours of operation of the production unit and the typical operating schedule of the production unit, as illustrated by the following example:

Highest annual production from previous five years: 3,570,000 tons.
Operating hours: 8,400 hours.
Hourly operating rate: 425 tons/hour.
Average daily operating rate (24 hour day): 10,200 tons/day.

The above example is for a process unit that is operated typically 24 hours per day with short-term outages for maintenance on a weekly or monthly basis. For facilities in the Steel Forming and Finishing subcategory that are operated typically less than 24 hours per day, the average daily operating rate must be determined based on the typical operating schedule (e.g., 8 hours per day for a facility operated one 8-hour turn (or shift) per day; 16 hours per day for a facility operated for two 8-hour turns per day). For example:

Highest annual production from previous five years: 980,000 tons.
Operating hours: 4,160 hours.
Hourly operating rate: 235.6 tons/hour.
Average daily operating rate (16 hour day): 3,769 tons/day.

In this example, EPA recognizes that the approach could cause problems for a facility that was operated 16 hours/day at the time the permit was issued and then wished to change to 24 hours/day based on unforeseen changes in market conditions. To address this issue, the approach could be combined with the tiered permit approach discussed above.

For multiple similar process units discharging to the same wastewater treatment system with one compliance point (e.g., two electroplating lines operated with one treatment system for process waters), the year with the highest annual production over the previous five years under Alternative C would be determined on the basis of the

sum of annual production for both electroplating lines. Then, based on this year's average daily operating rate, the daily production rates would be calculated as above independently for

each electroplating line using total annual production and annual operating hours for each line. The daily production values would be summed to calculate the average daily operating

rate for the combination of the two lines. For example, consider the following production data:

Year	Electroplating line A (tons)	Electroplating line B (tons)	Total (tons)
1995	1,859,000	1,305,000	3,155,000
1996	1,675,000	1,425,000	3,100,000
1997	1,760,000	1,406,000	3,166,000
1998	1,580,000	1,328,000	2,908,000
1999	1,825,000	1,380,000	3,205,000

Annual maximum production rates for each electroplating line and the combination of the two lines are *italicized*. In this example, 1999 was the maximum production year for the combination of the electroplating lines and the data from each line that year would be used to calculate the average daily operating rates. Had the 1995 data from Electroplating Line A and the 1996 data from Electroplating Line B been used in combination (3,275,000 tons),

an unrealistic measure of actual production might have resulted if the two electroplating lines could not produce at these high levels concurrently.

In contrast to the previous example, for multiple process units that are not similar, but have process wastewater commingled prior to treatment in one central wastewater treatment system with one compliance point, the year with the highest production over the

previous five years would be determined separately for each production unit (or combination of similar and different production units) with the highest annual production. For example, consider a situation where process wastewater for an electroplating line, a pressure deformation operation, and an acid pickling operation are discharged through one compliance point. Consider the following example:

Year	Electroplating (tons)	Pressure deformation (tons)	Acid pickling (tons)
1995	575,000	650,000	900,000
1996	650,000	700,000	1,000,000
1997	675,000	850,000	950,000
1998	750,000	825,000	1,125,000
1999	700,000	600,000	900,000

In this example, 1998 production data for the electroplating line, 1997 data from the pressure deformation operation, and 1998 data for the acid pickling operation would be used to develop the effluent limitations or pretreatment standards used in the permit/control mechanism.

Alternative D: The Agency is considering establishing production-based maximum monthly average effluent limitations and standards in combination with daily-maximum concentration-based effluent limitations and standards. Under this alternative, the maximum monthly average NPDES permit and pretreatment control mechanism mass basis requirements would be determined using the part 438 subpart E production-based standards in combination with a reasonable measure of actual production, such as Alternative C above. However, the daily-maximum requirements would be in the form of effluent concentrations that would be included in part 438 subpart E in lieu of the daily-maximum production-based mass effluent limitations guidelines and standards.

These daily maximum concentrations set out as effluent limitations guidelines and standards would be based on the long-term averages and variability factors derived from EPA sampling conducted post-proposal at steel forming and finishing facilities representative of BAT.

The Agency believes this approach would effectively address the potential issue cited above regarding short-term peaks in production under most circumstances. There would be no additional burden on the industry and permitting or control authorities for applying for and writing NPDES permits or pretreatment control mechanisms. Permitting and control authorities may need to revise their automated compliance tracking systems to account for both mass and concentration limitations at the same outfall, which is a common feature in many NPDES permits and pretreatment control mechanisms issued prior to this proposal.

EPA solicits comments on these alternatives to the proposed production bases for calculating effluent limitations

and pretreatment standards used in NPDES permits or control mechanisms. In particular, the Agency solicits comments on related costs and any technical difficulties that steel forming and finishing facilities might have in meeting limits during short periods of high production. EPA also solicits other options for consideration.

C. Monitoring Flexibility

1. Monitoring Waiver

EPA's Small Business Advocacy Review (SBAR) Panel encouraged EPA to "explore options for allowing certification in lieu of monitoring where an operator can determine, based on knowledge of the facility and its processes, that certain pollutants are not likely to be present or are adequately controlled." (See Section XXII.C for a discussion on the recommendations of the SBAR Panel). Other stakeholders expressed similar requests during public meetings with the Agency. Therefore, in an effort to reduce monitoring burden on facilities, EPA is proposing to allow MP&M indirect discharge facilities to

apply for a waiver that would allow them to reduce their monitoring burden (EPA discusses existing monitoring waivers available for direct dischargers later in this section). In order for a facility to receive a monitoring waiver, the facility would need to certify in writing to the control authority (*e.g.*, POTW) that the facility does not use, nor generate in any way, a pollutant (or pollutants) at its site and that the pollutant (or pollutants) is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. The facility would need to base this certification on sampling data or other technical factors. The certification would not be a waiver from the pollutant numerical limit in the control mechanism (*i.e.*, permit). It would only be a waiver from the monitoring requirements. In addition, EPA would still require the industrial user to monitor for the specified pollutants as part of the Baseline Monitoring Report (§ 403.12(b)) and the 90-day Compliance Report (§ 403.12(d)). EPA believes control authorities can use the sampling data generated from the Baseline Monitoring Report and the 90-day Compliance Report in conjunction with technical information on the raw materials and chemical processes used at the facility to determine whether there is sufficient reason to allow the monitoring waiver for any of the MP&M limited pollutants. Although EPA expects this monitoring waiver to reduce burden overall, the Agency estimates the burden associated with preparing the certification statement and related documentation as required by the Paper Reduction Act (see Section XXII.A for burden estimates).

EPA is proposing that the certification statement be submitted at the same time indirect discharging MP&M facilities submit "periodic reports on continued compliance" as directed by the General Pretreatment Standards (40 CFR 403.12(e)). Indirect dischargers submit such reports twice per year (typically June and December). In addition, the certification would need to be signed by the same individual that is authorized to sign the periodic reports as described in the General Pretreatment Standards 403.12(l). This monitoring waiver would be similar to the waiver in the Proposed "Streamlining the General Pretreatment Regulations for Existing and New Sources of Pollution," 64 FR 39564; July 22, 1999 (commonly referred to as "Pretreatment Streamlining"). If EPA promulgates the final Pretreatment Streamlining regulations prior to the final MP&M effluent guidelines and

those regulations contain a similar provision then a waiver specific to MP&M facilities would be unnecessary.

EPA recently promulgated a regulation to streamline the NPDES regulations ("Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations: Round Two" (65 FR 30886; May 15, 2000)). These revisions include a similar monitoring waiver for direct dischargers subject to effluent guidelines. Direct discharge facilities may forego sampling of a guideline-limited pollutant if that discharger "has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger." (65 FR 30908. 40 CFR 122.44). EPA noted, in the preamble to the final NPDES Streamlining rule, that it is providing a waiver from monitoring requirements, but not a waiver from the limit. In addition, the revision does not waive monitoring for any pollutants for which there are limits based on water quality standards. The waiver for direct dischargers lasts for the term of the NPDES permit and is not available during the term of the first permit issued to a discharger. Any request for this waiver under these revisions to the NPDES regulations must be submitted when applying for a reissued permit or modification of a reissued permit. Therefore, EPA is not proposing a monitoring waiver in the MP&M regulations for direct dischargers. When authorized by their permit writer, direct discharge facilities covered by any effluent guidelines (including MP&M) will be able to use the monitoring waiver contained in the NPDES streamlining final rule.

2. Monitoring Flexibility for Organic Pollutants

In an effort to reduce burden on MP&M facilities, EPA proposes three alternatives to allow for maximum flexibility while ensuring reductions in the amount of organic pollutants discharged from MP&M facilities. EPA is proposing to require MP&M facilities within the scope of this rule to either: (1) Meet a numerical limit for the total sum of a list of specific organic pollutants (similar to the Total Toxic Organics or TTO parameter used in the Metal Finishing Effluent Guidelines); (2) meet a numerical limit for TOC as an indicator parameter; or (3) develop and certify the implementation of an organic pollutant management plan.

As discussed in section II.D, EPA proposed using an organic pollutant

indicator parameter in the 1995 Phase I MP&M proposal. At that time, however, the Agency did not provide the alternative of monitoring for individual organic pollutants. In an effort to provide such an alternative, EPA reviewed the sampling data to identify individual organic pollutants for which the Agency could develop individual limits. Due to the variety of organic pollutants used across MP&M facilities, EPA determined that it would be burdensome to facilities and permit writers to have to determine which limits to apply to a facility. Instead, EPA is proposing an approach similar to the one used in the Metal Finishing Effluent Guidelines (40 CFR part 433). EPA developed a list of organic pollutants, called the Total Organics Parameter (TOP), using the list of organic priority pollutants and other nonconventional organic pollutants that met EPA's "pollutant of concern" criteria for this rule (see Section VII for a discussion on the selection of the MP&M pollutants of concern). Of the non-conventional organic chemicals on the MP&M pollutant of concern list, EPA included only those that were removed in appreciable quantities by the selected technology option (based on toxic weighted pound-equivalents) in two or more subcategories. See appendix B to part 438 of the proposed rule accompanying this notice for a list of organic pollutants that comprise the proposed Total Organics Parameter (TOP). EPA has derived the numerical limit for TOP based on the contribution of each of the organic pollutants on the list in Appendix B using the data collected during sampling and determined its limitation using the same statistical methodology used for other limits developed for this proposal (see Section VIII.B). In any case where the data for these pollutants indicated a level below the minimum level (*i.e.*, below quantitation), EPA used the minimum level for the specific pollutant in the summation of the total organics parameter limit. Facilities will only have to monitor for those TOP chemicals that are reasonably present (see XXI.C.1 for a discussion on monitoring waivers). Note that the TOP limit shall not be adjusted for those pollutants that are not reasonably present. EPA solicits comment on this methodology. For compliance purposes, pollutants that have been given a waiver (because they are not reasonably present) will be counted as zero in the TOP limit. For remaining pollutants, the reported value, when above the detection limit, shall be used in the TOP calculation. When a pollutant is

reported as a "non-detect" (*i.e.*, not found above the nominal quantitation value listed in appendix B of the proposed rule), the nominal quantitation value shall be used in the TOP calculation.

EPA considered using the same list of organic chemicals as in the Metal Finishing effluent guidelines Total Toxic Organics (TTO) list (40 CFR 433.11(e)), but rejected this approach. EPA did not include all parameters from the Metal Finishing TTO list because: (1) EPA did not find many of the TTO parameters in the wastewater sampled for the MP&M rule; (2) many of the listed organics are pesticides that are no longer manufactured (*e.g.*, DDT) and would not be used in MP&M operations; and (3) most facilities subject to the Metal Finishing TTO limits switched to the use of solvents (or aqueous cleaners) that do not contain the organic chemicals on the Metal Finishing TTO list.

As discussed above, EPA is also proposing to allow the use of an indicator parameter to measure the presence of organic pollutants in MP&M process wastewater. Facilities can monitor for the organic pollutants specified in the total organics parameter list (as discussed above) to demonstrate compliance with the TOP limit or they can monitor for Total Organic Carbon (TOC) and meet the TOC limit. EPA chose TOC as an indicator parameter because of its ability to measure all types of organic pollutants. EPA solicits comment on the use of TOC as an indicator pollutant for the organic pollutants typically found in wastewater discharges from MP&M facilities. EPA also requests comment on whether the Agency should allow facilities to choose an indicator pollutant from a given set of choices (*e.g.*, COD, Oil & Grease (as HEM), TOC, Total Petroleum Hydrocarbons (as SGT-HEM)). EPA found TOC to be the best general indicator parameter for measuring the sum of organic compounds in a wastestream. EPA notes, however, that to determine the best indicator parameter for a particular wastestream, a facility would need to consider the specific organic components found in its wastestreams.

Finally, EPA is proposing a third alternative to reduce monitoring burden—the use of an organic pollutant management plan. The organic pollutant management plan would need to specify, to the satisfaction of the permitting authority or control authority, the toxic and non-conventional organic constituents used at the facility; the disposal method used; the procedures in place for ensuring that

organic pollutants do not routinely spill or leak into the wastewater or that minimize the amount of organic pollutants used in the process; the procedures in place to manage the oxidation reduction potential (ORP) during cyanide destruction to control the formation of chlorinated organic byproducts; and the procedures to prevent the over dosage of dithiocarbamates when treating chelated wastewater. Facilities choosing to develop an organic pollutant management plan would need to certify that the procedures described in the plan are being implemented at the facility. Based on the current data base, EPA is concerned that wastewater generated by facilities in the Oily Wastes subcategory may require end-of-pipe treatment to reduce the concentrations of organic pollutants and that an organic management plan alone may not adequately control organic-bearing wastewater at facilities containing significant quantities of oil-bearing wastewater. Although EPA is proposing the use of the organics management plan be offered to Oily Wastes facilities, EPA solicits comment on whether sites with significant amounts of oil-bearing wastewater (for example, a facility in the Oily Waste subcategory) should be eligible for the use of an organic pollutant management plan in lieu of monitoring for TOP (Total Organics Parameter) or TOC (as an indicator).

3. Monitoring for Cyanide

For the General Metals, Metal Finishing Job Shop, Printed Wiring Board, and Steel Forming and Finishing subcategories, EPA is proposing to set a total cyanide limit. The point of compliance would be based on monitoring for total cyanide directly after cyanide treatment, before combining the cyanide treated effluent with other wastestreams. EPA is also proposing an alternative where a facility may take samples of final effluent, in order to meet the total cyanide limit, if the control authority adjusts the permit limits based on the dilution ratio of the cyanide wastestream flow to the effluent flow.

In addition, EPA has selected alkaline chlorination using sodium hypochlorite as the best available economically achievable technology for treating cyanide bearing wastewater from MP&M facilities. Not all cyanide however is amenable to alkaline chlorination due to "unavoidable" complexing with other compounds at the process source of the cyanide-bearing wastestreams. EPA believes that for some facilities it may be more accurate to monitor for the

portion of cyanide in their wastewater that is amenable to alkaline chlorination than to measure total cyanide which may include cyanide complexes that this technology is not likely to treat. Therefore, EPA is also proposing an alternative "amenable cyanide" limit for each of these subcategories which a facility may use directly after cyanide treatment (*e.g.*, before combining the cyanide treated effluent with other wastestreams). The Agency proposes to allow the use of this limit upon the agreement of the facility and its permit writer or control authority (*e.g.*, POTW). However, when segregated cyanide treatment is in place as a preliminary step prior to commingling wastewater for chemical precipitation, EPA would allow the amenable cyanide alternative limit to be measured at the end-of-pipe (*i.e.*, final effluent) if the control authority adjusts the permit limits based on the dilution ratio of the cyanide wastestream flow to the effluent flow. If facilities are not using cyanide destruction treatment on cyanide-bearing wastestreams prior to commingling with metal-bearing streams, additional complexing can occur. This additional complexing would render the cyanide "non-amenable" when it would otherwise be amenable to alkaline chlorination. EPA considers such complexing to be "avoidable" and would not allow the use of end-of-pipe monitoring for amenable cyanide when in-process cyanide destruction is not performed. (See the final Organic Chemicals, Plastics and Synthetic Fibers Category Effluent Limitations Guidelines for a discussion on non-amenable versus amenable cyanide; 57 FR 41836; September 11, 1992).

D. Pollution Prevention Alternative for the Metal Finishing Job Shops Subcategory

EPA is soliciting comment on a compliance alternative that the Agency is considering for the Metal Finishing Job Shops subcategory of this proposed regulation (See Section VI.C.3. of this preamble for a description of this subcategory). The purpose of a pollution prevention compliance alternative ("P2 Alternative") is to reduce economic impacts on the facilities in the Metal Finishing Job Shops subcategory and to take into consideration the activities and achievements of this Common Sense Initiative ("CSI") sector to test innovative approaches to environmental protection, which has culminated in the National Metal Finishing Strategic Goals Program.

The National Metal Finishing Strategic Goals Program ("SGP") was

developed out of EPA's sector based Common Sense Initiative. In 1994, EPA launched the CSI to promote "cleaner, cheaper, and smarter" environmental performance, using a non-adversarial, stakeholder consensus process to test innovative ideas and approaches. The SGP is a cooperative effort that involves all stakeholders (e.g., industry, regulators, environmental/citizen groups) to define a fundamentally different approach to environmental and public health protection by exploring a more flexible, cost-effective and environmentally protective solutions tailored to specific industry needs. The Metal Finishing SGP is a performance-based, voluntary program which includes commitments by the industry to meet multimedia environmental targets substantially reducing pollution from their operations beyond what is required by law. These goals will conserve water, energy and metals, and reduce hazardous emissions. The other stakeholders in this process (EPA, State and local regulators, and environmental/community groups) have also committed to working with the industry participants to help them meet their goals through compliance, technical, and financial assistance, removing regulatory and policy barriers, offering incentives, and an open dialogue as issues arise. (See <http://www.strategicgoals.org> for more information about the SGP and the Common Sense Initiative).

The SGP represents a long-term strategic vision for improved environmental protection by the entire metal finishing industry. The metal finishing industry's tangible commitment to work with the Agency lays the foundation for this pollution prevention (P2) compliance alternative.

The Agency is considering allowing indirect discharge facilities in the Metal Finishing Job Shops subcategory, with approval by their control authority (e.g., POTW), to demonstrate compliance with specified pollution prevention and water conservation practices (in addition to maintaining compliance with the existing Metal Finishing and Electroplating Effluent Guidelines or approved local water quality-based limits, whichever is more stringent) in lieu of meeting the requirements of the MP&M regulation. Facilities in the Metal Finishing Job Shops subcategory that do not wish to use the compliance alternative would need to meet the full requirements of the MP&M regulation as specified in today's proposed rule.

EPA solicits comment on whether to allow all facilities in the Metal Finishing Job Shops subcategory to comply with the P2 Alternative or

whether the P2 Alternative should only be available to facilities below a specified wastewater discharge volume. EPA has proposed low flow exclusions for indirect dischargers in the General Metals (1 MGY) and Oily Wastes (2 MGY) subcategories due to potential permitting burden on POTWs (see Sections II.D, VI.C and XII for a discussion on low flow exclusions).

One way that EPA is considering to specify pollution prevention and water conservation practices, without stifling innovation and advances, is to require facilities to choose practices from a larger list (or menu) of categories of specified practices (see below). EPA is considering requiring practices in all ten categories. The following is an example of the format and potential pollution prevention practices that EPA is considering for incorporation into the final MP&M rule:

Category 1. Must Use Practices That Reduce and/or Recover Drag-Out

To satisfy this requirement, facilities must implement three or more drag-out reduction practices or use at least one drag-out recovery (i.e., chemical recovery) technology listed below on all electroplating or surface finishing lines.

Drag-out Reduction Practices

- Lower process solution viscosity and/or surface tension by lowering chemical concentration, increasing bath temperature, or use wetting agents.
- Reduce drag-out volume by modifying rack/barrel design and perform rack maintenance to avoid solution trapping under insulation.
- Position parts on racks in a manner that avoids trapping solution.
- Reduce speed of rack/barrel withdraw from process solution and/or increase dwell time over process tank.
- Rotate barrels over process tank to improve drainage.
- Use spray/fog rinsing over the process tank (limited applicability).
- Use drip boards and return process solution to the process tank.
- Use drag-out tanks, where applicable, and return solution to the process tank.
- Work with customers to ensure that part design maximizes drainage

Drag-out Recovery

Use a chemical recovery technology to recover drag-out from wastewater.

- Evaporators
- Ion exchange
- Electrowinning
- Electrodialysis
- Reverse osmosis

Category 2. Must Use Good Rinse System Design for Water Conservation

To satisfy this requirement, facilities must implement three or more elements of good rinse system design listed below on all electroplating or surface finishing lines:

- Select the minimum size rinse tank in which the parts can be rinsed and use the same size for the entire plating line, where practical.
- Locate the water inlet and discharge points of the tank at opposite positions in the tank to avoid short-circuiting or use a flow distributor to feed the rinse water evenly.
- Use air agitation, mechanical mixing or other means of turbulence.
- Use spray/fog rinsing (less effective with hidden surfaces).
- Use multiple rinse tanks in a counter-flow configuration (i.e., counter-current cascade rinsing).
- Reuse rinse water multiple times in different rinse tanks for succeeding less critical rinsing

Category 3. Must Use Water Flow Control for Water Conservation

To satisfy this requirement, facilities must implement at least one effective method of water use control on all electroplating or surface finishing lines. Effective water use controls include, but are not limited to:

- Flow restrictors (Flow restrictors as a stand alone method of rinse water control are only effective with plating lines that have constant production rates, such as automatic plating machines. For other operations, there must also be a mechanism or procedure for stopping water flow during idle periods.)
- Conductivity controls
- Timer rinse controls
- Production activated control (e.g., spray systems activated when a rack or barrel enters/exits a rinse station)

Category 4. Must Segregate Non-Process Water From Process Water

To satisfy this requirement, facilities must not combine non-process water such as non-contact cooling water with process wastewater prior to wastewater treatment.

Category 5. Must Use Water Conservation Practices With Air Pollution Control Devices

To satisfy this requirement, facilities operating air pollution control devices with wet scrubbers must recirculate the scrubber water as appropriate (periodic blowdown is allowed, as needed). Where feasible, reuse scrubber water in process baths.

Category 6. Must Practice Good Housekeeping

To satisfy this requirement, facilities must demonstrate compliance with each of the requirements listed below:

- Perform preventative maintenance on all valves and fittings (*i.e.*, check for leaks and damage) and repair leaky valves and fittings in a timely manner.
- Inspect tanks and liners and repair or replace equipment as necessary to prevent ruptures and leaks. Use tank and liner materials that are appropriate for associated process solutions.
- Perform quick cleanup of leaks and spills in chemical storage and process areas.
- Remove metal buildup from racks and fixtures.

Category 7. Minimize the Entry of Oil Into Rinse Systems

To satisfy this requirement, facilities must do at least one of the practices listed below:

- Minimize the entry of oil into cleaning baths or use oil skimmers or other oil removal devices in cleaning baths when needed to prevent oil from entering rinse tanks.
- Work with customers to degrease parts prior to shipment to the plating facility to minimize the amount of oils on incoming materials.

Category 8. Must Sweep or Vacuum Dry Production Areas Prior to Rinsing With Water

To satisfy this requirement, facilities must sweep or vacuum dry production area floors prior to rinsing with water.

Category 9. Must Reuse Drum/Shipping Container Rinsate Directly in Process Tanks

To satisfy this requirement, when performing rinsing of raw material drums, storage drums, and/or shipping containers that contain pollutants regulated under the MP&M regulation, facilities must reuse the rinsate directly into process tanks or save for use in future production.

Category 10. Must Implement Environmental Management and Record Keeping System

To satisfy this requirement, facilities must meet the requirements listed below:

- Implement an environmental management program that includes, but is not limited to, the following elements:
 - Pollution prevention policy statement,
 - Environmental performance goals,
 - Pollution prevention assessment,
 - Pollution prevention plan,
 - Environmental tracking and record keeping system,

- Procedures to optimize control parameter settings (*e.g.*, ORP set point in cyanide destruction systems, optimum pH for chemical precipitation systems, etc.), and

- Statement delineating minimum training levels for wastewater treatment operators.

(EPA notes that it has developed a template for a metal finishing facility-specific Environmental Management System that is being used in conjunction with the SGP in EPA's Region 9 in California—see <http://www.strategicgoals.org/tools/home.htm> for information on this template).

The first two categories listed above involve practices and techniques for reducing drag-out. Drag-out is the film of chemical solution covering parts and fixtures as they exit process solutions. For many metal finishing operations, drag-out and the subsequent contamination of rinse waters is the major pollution control challenge. Reducing the formation of drag-out, minimizing the introduction of drag-out to rinse systems, and recovering drag-out are important pollution prevention measures. EPA believes that drag-out reduction and recovery may prevent a substantial pollutant loading of metals from being discharged to the POTW. However, EPA did not have sufficient information on the pollutant reductions, capital costs, and operating and maintenance costs associated with installation and operation of drag-out reduction and recovery technologies to include such equipment explicitly into the model that EPA uses to develop national estimates of compliance costs and pollutant reductions. Some aspects of drag-out reduction are captured in the flow rinse reduction modules of the cost and loadings model (see the Technical Development Document for a detailed discussion of the cost and loadings model). Good rinse design can reduce contamination of rinse water as well as reduce the volume of fresh water needed to perform the necessary rinsing. It also reduces the volume of wastewater requiring treatment, which in turn reduces costs and the volume of wastewater treatment sludge requiring disposal. EPA specifically solicits data on the pollutant reductions, capital costs, and operating and maintenance costs associated with installation and operation of drag-out reduction and recovery technologies.

EPA is considering allowing facilities complying with the P2 Alternative to substitute another pollution prevention practice for one listed above provided that the facility provides adequate justification for the modification in a written request submitted to the control

authority. Facility owners must certify compliance with the pollution prevention requirements twice per year and maintain records at the facility indicating how each category requirement has been satisfied. Facilities choosing the P2 Alternative would also need to agree to make the practices enforceable. Reporting would occur in conjunction with their twice annual periodic reports on continued compliance under the General Pretreatment Regulations (40 CFR 403.12(e)).

EPA solicits comment on all aspects of the Pollution Prevention Alternative for the Metal Finishing Job Shops subcategory including the list of practices as well as the possible format for the alternative. More specifically, EPA requests comment on whether there are additional practices that should be listed, the costs of implementing this compliance alternative, the pollutant reduction associated with this alternative, and whether EPA should offer this alternative to other subcategories (even those not currently regulated by the Metal Finishing and Electroplating effluent guidelines). EPA also requests comments from local regulators on the implementation burden, the required documentation, and on the ability to enforce a P2 Alternative.

E. Upset and Bypass Provisions

A “bypass” is an intentional diversion of the streams from any portion of a treatment facility. An “upset” is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. EPA's regulations concerning bypasses and upsets for direct dischargers are set forth at 40 CFR 122.41(m) and (n) and for indirect dischargers at 40 CFR 403.16 and § 403.17.

F. Variances and Modifications

The CWA requires application of effluent limitations established pursuant to section 301 or pretreatment standards of section 307 to all direct and indirect dischargers. However, the statute provides for the modification of these national requirements in a limited number of circumstances. Moreover, the Agency has established administrative mechanisms to provide an opportunity for relief from the application of the national effluent limitations guidelines and pretreatment standards for categories of existing sources for toxic, conventional, and nonconventional pollutants.

1. Fundamentally Different Factors Variances

EPA will develop effluent limitations or standards different from the otherwise applicable requirements if an individual discharging facility is fundamentally different with respect to factors considered in establishing the limitation of standards applicable to the individual facility. Such a modification is known as a "fundamentally different factors" (FDF) variance.

Early on, EPA, by regulation provided for the FDF modifications from the BPT effluent limitations, BAT limitations for toxic and nonconventional pollutants and BPT limitations for conventional pollutants for direct dischargers. For indirect dischargers, EPA provided for modifications from pretreatment standards. FDF variances for toxic pollutants were challenged judicially and ultimately sustained by the Supreme Court. (*Chemical Manufacturers Assn v. NRDC*, 479 U.S. 116 (1985)).

Subsequently, in the Water Quality Act of 1987, Congress added new section 301(n) of the Act explicitly to authorize modifications of the otherwise applicable BAT effluent limitations or categorical pretreatment standards for existing sources if a facility is fundamentally different with respect to the factors specified in section 304 (other than costs) from those considered by EPA in establishing the effluent limitations or pretreatment standard. Section 301(n) also defined the conditions under which EPA may establish alternative requirements. Under Section 301(n), an application for approval of FDF variance must be based solely on (1) information submitted during rulemaking raising the factors that are fundamentally different or (2) information the applicant did not have an opportunity to submit. The alternate limitation or standard must be no less stringent than justified by the difference and must not result in markedly more adverse non-water quality environmental impacts than the national limitation or standard.

EPA regulations at 40 CFR part 125 subpart D, authorizing the Regional Administrators to establish alternative limitations and standards, further detail the substantive criteria used to evaluate FDF variance requests for direct dischargers. Thus, 40 CFR 125.31(d) identifies six factors (e.g., volume of process wastewater, age and size of a discharger's facility) that may be considered in determining if a facility is fundamentally different. The Agency must determine whether, on the basis of one or more of these factors, the facility

in question is fundamentally different from the facilities and factors considered by EPA in developing the nationally applicable effluent guidelines. The regulation also lists four other factors (e.g., infeasibility of installation within the time allowed or a discharger's ability to pay) that may not provide a basis for an FDF variance. In addition, under 40 CFR 125.31(b)(3), a request for limitations less stringent than the national limitation may be approved only if compliance with the national limitations would result in either (a) a removal cost wholly out of proportion to the removal cost considered during development of the national limitations, or (b) a non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the national limits. EPA regulations provide for an FDF variance for indirect dischargers at 40 CFR 403.13. The conditions for approval of a request to modify applicable pretreatment standards and factors considered are the same as those for direct dischargers.

The legislative history of section 301(n) underscores the necessity for the FDF variance applicant to establish eligibility for the variance. EPA's regulations at 40 CFR 125.32(b)(1) are explicit in imposing this burden upon the applicant. The applicant must show that the factors relating to the discharge controlled by the applicant's permit which are claimed to be fundamentally different are, in fact, fundamentally different from those factors considered by the EPA in establishing the applicable guidelines. The pretreatment regulations incorporate a similar requirement at 40 CFR 403.13(h)(9).

An FDF variance is not available to a new source subject to NSPS or PSNS.

2. Economic Variances

Section 301(c) of the CWA authorizes a variance from the otherwise applicable BAT effluent guidelines for nonconventional pollutants due to economic factors. The request for a variance from effluent limitations developed from BAT guidelines must normally be filed by the discharger during the public notice period for the draft permit. Other filing time periods may apply, as specified in 40 CFR 122.21(1)(2). Specific guidance for this type of variance is available from EPA's Office of Wastewater Management.

3. Water Quality Variances

Section 301(g) of the CWA authorizes a variance from BAT effluent guidelines for certain nonconventional pollutants due to localized environment factors.

These pollutants include ammonia, chlorine, color, iron, and total phenols.

4. Permit Modifications

Even after EPA (or an authorized State) has issued a final permit to a direct discharger, the permit may still be modified under certain conditions. (When a permit modification is under consideration, however, all other permit conditions remain in effect.) A permit modification may be triggered in several circumstances. These could include a regulatory inspection or information submitted by the permittee that reveals the need for modification. Any interested person may request that a permit modification be made. There are two classifications of modifications; major and minor. From a procedural standpoint, they differ primarily with respect to the public notice requirements. Major modifications require public notice while minor modifications do not. Virtually any modification that results in less stringent conditions is treated as a major modification, with provisions for public notice and comment. Conditions that would necessitate a major modification of a permit are described in 40 CFR 122.62. Minor modifications are generally non-substantive changes. The conditions for minor modification are described in 40 CFR 122.63.

G. Relationship of Effluent Limitations and Pretreatment Standards to NPDES Permits and Local Limits

Effluent limitations and pretreatment standards act as a primary mechanism to control the discharges of pollutants to waters of the United States. These limitations and standards are applied to individual facilities through NPDES permits and local limits developed for POTWs issued by EPA or authorized States under section 402 of the Act and local pretreatment programs under section 307 of the Act.

The Agency has developed the limitations and standards for this proposed rule to cover the discharge of pollutants for this industrial category. In specific cases, the NPDES permitting authority or control authority (e.g., local POTW) may elect to establish technology-based permit limits or local limits for pollutants not covered by this regulation. In addition, if State water quality standards or other provisions of State or Federal law require limits on pollutants not covered by this regulation (or require more stringent limits or standards on covered pollutants to achieve compliance), the permitting or control authority must apply those limitations or standards.

H. Best Management Practices

Sections 304(e) and 402(a) of the Act authorize the Administrator to prescribe "best management practices" (BMPs). (See 40 CFR 122.44(k)). EPA may develop BMPs that apply to all industrial sites or to a designated industrial category and may offer guidance to permit authorities in establishing management practices required by unique circumstances at a given plant. Dikes, curbs, and other control measures are being used at some MP&M sites to contain leaks and spills as part of good "housekeeping" practices. However, on a facility-by-facility basis a permit writer may choose to incorporate BMPs into the permit. See section 8 of the Technical Development Document for this proposed rule for a detailed discussion of pollution prevention and best management practices used in the MP&M industry.

XXII. Related Acts of Congress, Executive Orders, and Agency Initiatives

A. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1980.01) and a copy may be obtained from Sandy Farmer by mail at Collection Strategies Division; U.S. Environmental Protection Agency (2822); 1200 Pennsylvania Ave., NW., Washington, DC 20460, by email at farmer.sandy@epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>.

There are five areas for which EPA is proposing, or considering to collect information from, or requiring reporting or record keeping by MP&M facilities. In all cases, EPA believes the collection of information, reporting, or record keeping is an alternative (*i.e.*, voluntary) that will allow a reduction in overall burden to facilities since EPA intends for these activities to reduce or eliminate effluent sampling and analysis costs. EPA solicits comment on all estimates discussed below.

First, EPA is proposing to allow indirect discharging MP&M facilities (upon agreement with the control authority) to reduce their analytical monitoring burden for specified pollutants by filing a statement that certifies that those pollutants are not present in the discharge or are present

only at background levels from intake water and without any increase in the pollutants due to activities of the discharger (See § 438.4(e) and Section XXI.C.1 for a discussion of the monitoring waiver). EPA estimates the burden for reviewing analytical sampling data and other technical information required to make the certification (*e.g.*, raw material inventory logs, production information, product chemistry, and reports on source water) and for preparing the certification statement one time per permit cycle (*i.e.*, every 5 years) to be 24 hours. In developing the technical basis for the waiver, EPA is allowing the use of historical sampling data as well as sampling data generated for compliance reports required by the General Pretreatment Standards (40 CFR 403.12). Therefore, EPA does not anticipate additional monitoring burden associated with this waiver, particularly in comparison to the periodic compliance monitoring that is being replaced by this waiver. In addition, certification to receive a monitoring waiver under this proposed rule is voluntary. MP&M facilities may choose not to avail themselves of this optional reduction in monitoring. EPA estimates that 5,250 facilities will choose the monitoring waiver for some pollutants.

Second, EPA is proposing to allow facilities to implement an organic pollutant management plan as one alternative to meeting organic pollutant limits (or organic indicator limits). (See 438.4(b)). The organic pollutant management plan must specify, to the satisfaction of the permitting authority or control authority, the toxic and non-conventional organic constituents used at the facility; the disposal method used; the procedures in place for ensuring that organic pollutants do not routinely spill or leak into the wastewater or that minimize the amount of organic constituents used in the process; the procedures in place to manage the oxidation reduction potential (ORP) during cyanide destruction to control the formation of chlorinated organic byproducts; and the procedures to prevent the over dosage of dithiocarbamates when treating chelated wastewater. Facilities choosing to develop an organic pollutant management plan must certify that the procedures described in the plan are being implemented at the facility. EPA estimates the burden associated with preparing an organic pollutant management plan and an accompanying certification statement to be 50 hours. After the initial plan is approved, EPA estimates one additional hour of burden

(once per year for direct dischargers and twice per year for indirect dischargers) for facilities to verify that the plan is being implemented and to prepare the certification statement. However, EPA believes that facilities that are already regulated by the Metal Finishing Effluent Guidelines (40 CFR part 433) and that have a solvent management plan in place under those regulations will only require 20 hours to update their plan for the initial submittal. EPA estimates 7,200 facilities will choose to implement an organics management plan in lieu of monitoring.

Third, EPA is considering an alternate approach to the use of an organic indicator parameter (see Section XXI.C.2 for a discussion on the proposed organic indicator). EPA notes that this alternate approach is not being proposed in today's notice, but is being considered for the final rule. In this case, there would be some additional reporting and record keeping. MP&M facilities could choose an indicator pollutant parameter from a given set of choices. EPA would require facilities to demonstrate a correlation between the chosen indicator parameter and the regulated organic pollutants (*i.e.*, the TOP organic pollutants) found in their wastewater. EPA is soliciting comment on this approach and has estimated the burden of performing testing, analyzing analytical results, and keeping records that demonstrate a correlation between the regulated organic pollutants and the selected indicator parameter to be between 70 and 100 hours per facility once per permit cycle (*i.e.*, 5 years). If no major changes in processes or raw materials occur during that period, the demonstration would not have to be repeated for the next permit cycle. The Agency notes that the choice of an option would be voluntary. EPA has estimated less burden for direct dischargers than for indirect dischargers (*i.e.*, 70 hours versus 100 hours) because the direct dischargers typically have more advanced treatment in place and permit writers typically require them to monitor for the types of parameters that EPA is considering as indicators (*e.g.*, COD, Oil & Grease, TOC, TPH), and therefore, may have data available that demonstrates a correlation to the regulated organic pollutants. EPA estimates that given the choice, approximately 515 facilities would choose to demonstrate and use a site-specific organic pollutant indicator.

Fourth, EPA is considering whether to allow certain facilities in the Metal Finishing Job Shops subcategory to demonstrate compliance with specified pollution prevention and water conservation practices (in addition to

maintaining compliance with the existing Metal Finishing and Electroplating Effluent Guidelines) in lieu of meeting the requirements of the MP&M regulation. EPA notes that this alternate approach is not being proposed in today's notice, but is being considered for the final rule. Facilities in the Metal Finishing Job Shops subcategory that do not wish to use the compliance alternative would need to meet the full requirements of the MP&M regulation as specified in today's proposed rule (see section XXI.D for a discussion of the Pollution Prevention Alternative). EPA has estimated the burden associated with preparing the associated certification statements to be 30 minutes each. Facilities would submit certification statements one time initially (by the compliance deadline) and twice per year thereafter for indirect dischargers, or once per year for direct dischargers. In addition, EPA estimates the burden associated with record keeping and reporting for the other related compliance paperwork to be 40 hours one time for the period of the permit or control mechanism (*i.e.*, five years). EPA is also soliciting comment on whether facilities in other subcategories should have a similar alternative. EPA estimates that if the Pollution Prevention Alternative were available to facilities in the Metal Finishing Job Shops Subcategory, 1,360 facilities would choose this alternative. In addition, EPA estimates that there would be 550 additional respondents if a limited number of other subcategories were able to choose this compliance alternative.

Finally, EPA is proposing to set numerical limitations on the discharge of Total Sulfide from facilities in several subcategories. In an effort to reduce monitoring burden on indirect dischargers, EPA is considering (but not proposing) to allow a waiver for the monitoring of total sulfide (even when present), at the discretion of the POTW, when a facility demonstrates that the sulfides will not generate acidic or corrosive conditions and will not create conditions that enhance opportunities for release of hydrogen sulfide gas in the sewer/interceptor collection system or at the receiving POTW or otherwise interfere with the operation of the POTW. EPA estimates the burden associated to make such a demonstration is 100 hours. EPA would require this only one time per permit cycle and if no major changes in processes or raw materials occur during that period, the demonstration would not have to be repeated for the next permit cycle. EPA estimates that 4,420

facilities would be respondents under the total sulfide waiver if it were available.

The total burden for the two areas which are being proposed today is 437,070 hours for approximately 7,200 facilities [Note: approximately 5,200 facilities are expected to be respondents in both areas]. In addition, for the three areas that EPA is not proposing but is considering for the final rule, EPA estimates 565,595 hours for 6,845 respondents (some facilities may be respondents in more than one of the three areas). Labor costs are accounted for within the estimated burden hours. EPA estimates that there are no capital costs associated with these potential reporting and record keeping requirements. EPA estimates a reduction in the capital and operating and maintenance costs associated with monitoring to demonstrate compliance with numerical limits, particularly for the proposed monitoring waiver for indirect dischargers and the organics management plan.

In the cases discussed above, the data and information required by the proposed or considered information collection, reporting, or record keeping requirements can be claimed as confidential business information according to the regulations found in 40 CFR part 2. However, as specified at 40 CFR 2.302, effluent data submitted in response to these information and data requests can not be claimed as confidential.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15.

The Agency requests comments on its need for this information, the accuracy

of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division; U.S. Environmental Protection Agency (2822); 1200 Pennsylvania Ave., NW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW., Washington, DC 20503, marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after January 3, 2001, a comment to OMB is best assured of having its full effect if OMB receives it by February 2, 2001. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

B. Unfunded Mandates Reform Act (UMRA)

1. UMRA Requirements

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why EPA did not adopt that alternative. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially

affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Estimated total annualized before-tax costs of compliance for the proposed rule are \$2,034 million (\$1999). Of this total, \$2,020 million is incurred by the private sector and \$14 million is incurred by State and local governments that perform MP&M activities. Permitting authorities incur an additional \$0.115 to \$0.912 million to administer the rule, including labor costs to write permits and to conduct compliance monitoring and enforcement activities. Thus, EPA has determined that this rule contains a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. Accordingly, EPA has prepared under section 202 of the

UMRA a written statement which is summarized below.

2. Analysis of Impacts on Government Entities

Although the costs of implementation (and compliance for government-owned facilities) are approximately \$15 million annually (*i.e.*, below the threshold specified in section 202) MP&M is a large industrial category and EPA fully analyzed the impacts on State and local governments. The proposed MP&M Rule will affect governments in two ways:

- Government-owned MP&M facilities may be directly affected by the MP&M regulation and therefore incur compliance costs; and
- Municipalities that own Publicly Owned Treatment Works (POTWs) that receive influent from MP&M facilities subject to the regulation may incur additional costs to implement the proposed rule. These include costs associated with permitting MP&M facilities that have not been previously permitted, and with repermitting some MP&M facilities earlier than would otherwise be required. In addition, POTWs may elect to issue mass-based permits to some MP&M facilities that

currently have concentration-based permits, at an additional cost.

a. Compliance Costs for Government-Owned MP&M Facilities

EPA administered a survey (the "Municipal Survey") to government-owned facilities to assess the cost of the regulation on these facilities and the government entities that own them. (See Section V.B for a discussion of EPA's data collection efforts.) The survey responses provide the basis for EPA's analysis of the budgetary impacts of the proposed regulation, including the size and income of the populations served by the affected government entities; the government's current revenues by source, taxable property, debt, pollution control spending, and bond rating; and the costs, funding sources, and other characteristics of the MP&M facilities owned by each government entity. Table XXII.B-1 provides national estimates of the government entities that operate MP&M facilities potentially subject to the proposed rule. Table XXII.B-2 summarizes the annualized compliance costs incurred by government entities by regulatory option.

TABLE XXII.B-1.—NUMBER OF GOVERNMENT-OWNED FACILITIES BY TYPE AND SIZE OF GOVERNMENT ENTITY

Size of government and Status under proposed option	Municipal government	State government	County government	Regional governmental authority	Total
Large Governments (population > 50,000)					
Number of government entities > flow cutoff	60	183	77	0	319
Number of government entities ≤ flow cutoff	512	183	610	36	1,341
Small Governments (population ≤ 50,000)					
Number of government entities > flow cutoff	410	.....	.....	.....	410
Number of government entities ≤ flow cutoff	1,781	.....	481	.....	2,262
All Governments					
Number of government entities > flow cutoff	470	183	77	0	729
Number of government entities ≤ flow cutoff	2,293	183	1,091	36	3,603
Total	2,763	366	1,167	36	4,332

TABLE XXII.B-2.—NUMBER OF REGULATED GOVERNMENT-OWNED FACILITIES AND COMPLIANCE COSTS BY SIZE OF GOVERNMENT AND REGULATORY OPTION

	Proposed option		Option 2/6/10		Option 4/8	
	Number of facilities subject to regulation	Compliance costs (million 1999\$)	Number of facilities subject to regulation	Compliance costs (million 1999\$)	Number of facilities subject to regulation	Compliance costs (million 1999\$)
Facilities Owned by Large Governments	319	\$11.3	1,660	31.5	1,660	\$101.3
Facilities Owned by Small Governments	410	2.6	2,672	33.3	2,672	123.4
All Government-Owned Facilities	729	13.9	4,332	64.8	4,332	224.7

Costs incurred by government-owned facilities, particularly for facilities

owned by small governments, are substantially lower under the proposed

rule than under the other two options considered. The lower costs result from

the exclusion of a large number of government-owned facilities under the proposed low flow cutoff.

b. Small Government Impacts

EPA's analysis also considered whether the proposed rule may significantly or uniquely affect small governments. Section XVI.B.3.c of today's notice describes the methodology used to assess budgetary impacts on governments. Briefly, EPA examined three measures to assess the affordability of new requirements. These three criteria incorporate measures of compliance costs (impacts on site-level cost of service), impacts on taxpayers, and impact on government debt levels.

EPA estimates that there are 2,672 facilities owned by small governments (*i.e.*, governments with a population of less than 50,000). The low flow exclusion in today's proposed rule will exclude 2,262 small government-owned MP&M facilities. Thus, the proposed rule covers 410 small government-owned facilities. Of these facilities, 140 incur no compliance costs under the proposed option, and the remaining 270 incur annualized costs that average less than \$10,000 per facility. The total compliance cost for all the small government-owned facilities incurring costs under today's proposed rule is \$2.6 million. Only 140 of the 270 facilities have costs greater than 1 percent of baseline cost of service (measured as total facility costs and expenditures, including operating, overhead and debt service costs and expenses). EPA estimated no significant impacts for any of the governments owning these facilities, based on the three budgetary criteria mentioned above. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. None of the affected governments are expected to incur significant budgetary impacts as a result of the proposed rule, and consequently, that the proposed rule will not significantly or uniquely affect small governments. Nonetheless, EPA did consult with small governments (see discussions on consultation in sections XXII.B.7 and XXII.C).

c. POTW Administrative Costs

EPA also analyzed the administrative costs incurred by local governments to implement the proposed rule. The results of this analysis are presented in section XVI.H.3. In summary, EPA estimates that POTWs will incur incremental average annualized costs over 15 years of between \$115,000 and \$912,000 under the proposed rule. The

maximum expenditures by all affected POTWs in any one year will be between \$186,000 and \$1,607,000. These costs include issuing new permits to facilities that do not currently have permits, issuing mass-based permits to some facilities that currently have concentration-based permits, and repermitting some facilities sooner than would otherwise be required to meet the three-year compliance schedule. On average, a POTW's costs for the incremental permitting are only \$23 to \$184 for the 4,944 MP&M facilities permitted under the proposed rule. EPA expects that these increases in costs will be partially offset by reductions in government administrative costs for facilities that are already permitted under local limits and that will be repermitted under this rule.

3. Statutory Authority

The statutory authority for this rulemaking is as follows: Sections 301, 304, 306, 307, 308, 402 and 501 of the Clean Water Act, 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361 and the Pollution Prevention Act of 1990, 42 U.S.C. 13101 *et seq.*, Pub L. 101-508, November 5, 1990. A consent decree with the Natural Resources Defense Council established a deadline of October 2000 for EPA to propose effluent limitations for this industry.

4. Costs and Benefits

The assessment of costs and benefits for this rule, including the assessment of costs to State, local, and Tribal governments and to the private sector, is discussed above and in Sections XVI (costs), XX (benefits) of this preamble. EPA prepared an extensive analysis of costs and benefits for private facilities and for governments, including analysis by size and by subcategory. In the most summarized form, EPA estimates the social cost of the proposed rule (which includes facility compliance costs) at \$2.0 to \$2.1 billion annually (\$1999). The total value of benefits that can be expressed in dollar terms ranges from \$0.4 billion to \$1.1 billion. As discussed in Section XX, EPA solicits comment on several expansions to these benefit estimates. In particular, EPA includes in the public record for today's proposal, an extensive analysis of additional categories of benefits, such as boating and wildlife viewing. EPA also estimated values for these new categories, but pending public comment and peer review, did not incorporate the results from the new methodologies into the total monetized benefits of the proposed rule.

The Federal resources (*i.e.*, water pollution control grants) which are

generally available for financial assistance to States are included in section 106 of the Clean Water Act. There are no Federal funds available to defray the costs of this rule on local governments.

5. Future Costs and Disproportionate Costs

The Unfunded Mandates Reform Act requires that EPA estimate, where accurate estimation is reasonably feasible, future compliance costs imposed by the rule and any disproportionate budgetary effects. EPA's estimates of the future compliance costs of this rule are discussed in detail in Section XVI.G of the preamble. Briefly, new sources in all but the Metal Finishing Job Shop direct discharger subcategory incur costs that are below one percent of post-regulation revenues, and costs for the Metal Finishing Job Shop indirect dischargers are less than three percent of estimated facility revenues. Cost increases of this magnitude are unlikely to place new facilities at a competitive disadvantage relative to existing sources. Moreover, costs as a percentage of revenues are generally comparable for new sources and existing sources with which they will compete.

EPA does not expect that the rule will have disproportionate budgetary effects on any particular areas of the country, particular governments or types of communities. The affected population of MP&M facilities is distributed throughout the country in settings from urban to rural, with more facilities likely to be located in larger urban areas. EPA therefore expects that the burden on governments to permit facilities under the rule, and the loss of employment due to closures caused by the rule, will be dispersed rather than concentrated in any specific area. Moreover, the proposed rule is expected to result in a net increase in employment over 15 years, when the employment associated with compliance activities is considered. A discussion of community impacts is included in Section XVI.

6. Effects on National Economy

The Unfunded Mandates Reform Act requires that EPA estimate the effect of this rule on the national economy where (1) accurate estimates are feasible and (2) the rule will have a "material" effect on the economy. EPA's estimates of the impact of this proposal on the national economy are described in Section XVI of this preamble and in the EEBA. The proposed rule is projected to result in closures or moderate financial impacts on a very small percentage of all MP&M

facilities, to result in only limited price increases in any MP&M sector, and to have a negligible impact on the U.S. balance of trade.

7. Consultation

In addition to private industry, our stakeholders include State and local government regulators. We consulted with all of these stakeholder groups on topics such as options development, cost models, pollutants to be regulated, cost of the regulation, and compliance alternatives. Some of the stakeholders provided helpful comments on the cost models, technology options, pollution prevention techniques, and monitoring alternatives.

Because many facilities affected by this proposal are indirect dischargers, the Agency involved POTWs as they will have to implement the rule. EPA consulted with POTWs individually and through the Association of Municipal Sewerage Agencies (AMSA). In addition, EPA consulted with pretreatment coordinators and State and local regulators.

The Agency collaborated with POTWs in selecting BAT facilities for EPA wastewater sampling and, in several cases, POTWs performed wastewater sampling and submitted the data to EPA for use in developing the rule. As described above and in Section V.B, EPA conducted the POTW survey to obtain estimates of POTW permitting costs and sludge disposal practices and costs. EPA assessed whether any impacts of the regulatory requirements in the rule might significantly or uniquely affect POTWs, especially small POTWs, and determined the degree to which POTWs would benefit from the regulation by having more options for sewage sludge disposal and decreased costs of disposing of the sludge.

EPA consulted with State and local regulators during three different public meetings. Their main comments focused on: (1) The potential burden on them to issue permits/control mechanisms for a large number of facilities that have not been permitted under effluent guidelines prior to this rule; (2) request for additional monitoring flexibilities; and (3) request to allow them to use concentration-based standards in the MP&M rule for those subcategories where it is difficult to obtain production or flow information at the process-level. EPA has incorporated many of their suggestions and addressed these

concerns throughout today's preamble (see Sections II.D, XII.C, and XXI).

8. Alternatives Considered

EPA believes that the proposed rule is the least burdensome and most cost-effective of the regulatory alternatives considered that still meets the objectives of the rule. EPA acknowledges that the rule will impose some burden, but EPA believes that the additional costs are justified due to the additional pollutant removals. The proposed low-flow cutoffs and subcategory exemptions reduce the number of facilities that require permitting by over 90 percent. Section XVI.H presents EPA's analysis of the facility impacts of the proposed rule, which shows that facility compliance costs would be 36 percent higher under Option 2/6/10 than under the proposed rule and 120 percent higher under Option 4/8. Section XVII presents EPA's analysis of the cost-effectiveness of the regulatory options, which shows that the proposed option is the most cost-effective of these three options.

C. Regulatory Flexibility Act (RFA) as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute, unless the Administrator certifies that the rule will not have significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental organizations.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as (1) A small business according to the Regulations of the Small Business Administration (SBA) at 13 CFR 121.201, which define small businesses for Standard Industrial Classification (SIC) codes; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

In accordance with Section 603 of the RFA, EPA prepared an initial regulatory flexibility analysis (IRFA) that examines the impact of the proposed rule on small entities, along with regulatory alternatives that could reduce that impact. The IRFA is available for review in the public record (as Chapter 10 in the Economic, Environmental, and Benefits Analysis) and is summarized below.

1. Initial Regulatory Flexibility Analysis

a. Rationale, Objectives, and Legal Basis for Proposal

EPA's "Preliminary Data Summary for the Machinery Manufacturing and Rebuilding Industry" (EPA 440/1-89/106) identified the Metal Products and Machinery (MP&M) industry as one that is discharging wastestreams containing toxic pollutants to publicly owned treatment works and directly into the nation's surface waters. The volume and characteristics of these wastestreams are described more fully in Section VII of this notice. Due to the water quality, human health, and environmental concerns associated with these discharges, EPA selected the MP&M industry for the development of a new effluent guidelines regulation in 1990. The Agency develops categorical effluent limitations under authority of the Clean Water Act (33 U.S.C. 1251 *et seq.*). Section I of this notice discusses the legal basis for the proposed rule in more detail. Briefly, the Clean Water Act directs the Agency to reduce discharges of pollutants into the Nation's water and into publicly-owned treatment works. The objective of today's proposed rule is to reduce those discharges from the class of point sources in the MP&M industry.

b. Number and Type of Small Entities

A large number of the 63,000 MP&M facilities nationwide are owned by small entities. The small entities covered by this proposed rule are small businesses and small governmental jurisdictions. Table XXII.C-1 shows the total number of facilities operating in the baseline and the number owned by small entities. Overall, approximately 80 percent of all MP&M facilities are owned by small entities. However, it should be noted that the low flow exclusions in the proposed rule will exclude approximately 85 percent of the facilities owned by small entities.

TABLE XXII.C-1.—PERCENT OF MP&M FACILITIES OWNED BY SMALL ENTITIES

Type of Facility	Number of facilities operating in baseline	Number of facilities owned by small entities	Percent of facilities owned by small entities
Private MP&M *	54,591	44,773	82%
Government-Owned	4,332	2,672	62%
Total *	58,923	47,445	81%

* Excludes baseline closures.

The SBA definitions for small business use either employment-based or revenue-based standards, depending on the Standard Industrial Classification (SIC) code. The manufacturing sectors generally use employment-based standards, and most non-manufacturing sectors use revenue-based standards. MP&M facilities perform a wide variety

of activities, represented by over 200 SIC codes. To assess the impacts of the rule on small entities, for analytical purposes, these SIC codes were organized into 18 industry sectors, with some further distinctions by type of activity (*i.e.*, manufacturing or maintenance/repair). To select a small business definition for each sector, EPA

chose the SBA standard that was common to the most SIC Codes (*i.e.*, the mode of the distribution of SBA definitions) in a particular sector (or activity). Table XXII.C-2 lists the definitions by sector used in the impact assessment.

TABLE XXII.C-2.—SMALL BUSINESS DEFINITIONS FOR ANALYZING MP&M SECTORS

Sector and activity	Small business definition using the most common SBA standard for the SIC codes in each sector
Hardware	500 Employees.
Aircraft—Manufacturing	1,000 Employees.
Aircraft—Maintenance/Repair	\$5 Million.
Electronic Equipment	750 Employees.
Stationary Industrial Equip.—Manufacturing	500 Employees.
Stationary Industrial Equip.—Maint/Repair	\$5 Million.
Ordnance	1,000 Employees.
Aerospace	1,000 Employees.
Mobile Industrial Equip	500 Employees.
Instruments—Manufacturing	500 Employees.
Instruments—Maintenance/Repair	\$5 Million.
Precious Metals/Jewelry—Manufacturing	500 Employees.
Precious Metals/Jewelry—Maintenance/Repair	\$5 Million.
Ship—Manufacturing	1,000 Employees.
Ship—Maintenance/Repair	500 Employees.
Ship—Maintenance/Repair (SIC 449) ¹	\$5 Million.
Household Equip.—Manufacturing	500 Employees.
Household Equip.—Maintenance/Repair	\$5 Million.
Railroad—Manufacturing	1,000 Employees.
Railroad—Maintenance/Repair	1,500 Employees.
Motor Vehicle—Manufacturing	500 Employees.
Motor Vehicle—Maintenance/Repair	\$5 Million.
Motor Vehicle—Maintenance/Repair (SIC 5013) ²	100 Employees.
Bus & Truck—Manufacturing	500 Employees.
Bus & Truck—Maintenance/Repair	\$5 Million.
Office Machines—Manufacturing	1,000 Employees.
Office Machines—Maintenance/Repair	\$18 Million.
Steel Forming & Finishing	1,000 Employees.
Printed Circuit Boards	500 Employees.
Metal Finishing & Electroplating Job Shops	500 Employees.
Other Metal Products—Manufacturing	500 Employees.
Other Metal Products—Maintenance/Repair	\$5 Million.

Notes:

¹ SIC Code 449—Includes 4491 (Marine Cargo), 4492 (Towing & tugboat service), 4493 (Marinas), and 4499 (Water Transportation Services, nec).

² SIC Code 5013—Wholesale distribution of motor vehicle supplies, tools and equipment; and new motor vehicle parts.

c. Impacts on Small Entities

For small businesses, EPA drew on the firm and facility impact analyses discussed in Section XVI of this notice

to assess impacts on small entities. The analysis compared compliance costs to revenues for the small entities at the firm level. EPA also examined the

facility impact analysis results for facilities owned by small firms. The facility impact analysis estimated facility closures and other adverse

changes to financial conditions (denoted here as "moderate impacts"). See Section XVI.B of this notice for details on how EPA determines closures and moderate impacts for private businesses. The results from these analyses are discussed in more detail in the following paragraphs. Briefly, these analyses indicated that 941 of the small entities may incur costs equal to 3 percent or more of annual revenues, 181 facilities owned by small entities might close as a result of the proposed rule, and 492 facilities owned by small entities are likely to experience moderate financial impacts. The 181 small entity facility closures represent less than one-half of one percent of the facilities owned by small entities that are operating in the baseline. Although

the percentage of small facilities projected to incur impacts is quite small, the number, in absolute terms, was large enough for the Agency to conclude that a small business analysis was appropriate. After EPA considers comments and data received in response to this proposed rulemaking, especially with regard to the IRFA, the Panel's recommendations, and alternatives that would reduce small entity impacts, EPA will adjust the rule as appropriate and it is possible that the final rule will not have a significant economic impact on a substantial number of small entities. Consequently, there is a possibility that the Agency may not prepare a final regulatory flexibility analysis and would certify the final rule.

i. Compliance Costs as a Percent of Firm Revenue

EPA compared compliance costs to revenues at the firm level as a measure of the relative burden of compliance costs. Table XXII.C-3 shows the results of this comparison. The Agency was not able to estimate national numbers of firms that own MP&M facilities precisely, because the sample weights based on the survey design represent numbers of facilities rather than firms. The results in Table XXII.C-3 are reasonable approximations, however, in that 95 percent of the facilities owned by small firms are single-facility firms, for which sample weights could be used.

TABLE XXII.C-3.—FIRM LEVEL BEFORE-TAX ANNUAL COMPLIANCE COSTS AS A PERCENT OF ANNUAL REVENUES FOR PRIVATE SMALL BUSINESSES

Number of small firms in the analysis	Number and percent with before-tax annual compliance costs annual revenues equal to:					
	Less than 1%		1-3%		Over 3%	
	Number	Percent	Number	Percent	Number	Percent
42,509	40,560	95.4%	1,008	2.4%	941	2.2%

Approximately 85 percent of the small entities are not projected to incur any costs to comply with the proposed rule because they are among the facilities covered by the low flow exclusions (See Section XII for discussion of the low flow exclusions). Even so, the IRFA includes a cost analysis for all small facilities. The results reported here account for the exclusions. More than 95 percent of small entities incur compliance costs

less than 1 percent of annual revenues. A small percentage (2 percent) of the small businesses in the analysis incur costs equal to 3 percent or more of annual revenues. (Results of the cost-to-sales ratios are presented in the EEBA.) Of the small firms that incur costs greater than 1 percent of revenues, 612 firms are projected by the facility impact analysis to close or experience moderate impacts.

ii. Facility Closures and Moderate Impacts

Table XXII.C-4 summarizes the results from the facility closure analysis for the proposed option for private facilities owned by small entities, by discharge status. Table XXII.C-4 also shows the number of facilities owned by small businesses that experience moderate impacts.

TABLE XXII.C-4.—CLOSURES AND MODERATE IMPACTS FOR PRIVATE FACILITIES OWNED BY SMALL ENTITIES

	All facilities	Indirect dischargers	Direct dischargers
Number of facilities operating in the baseline	44,773	41,536	3,237
Number of closures	181	161	20
Percent closing	0.40%	0.39%	0.62%
Number of facilities with moderate impacts	492	454	38
Percent with moderate impacts	1.1%	1.1%	1.2%

Again, approximately 85 percent of the facilities owned by small entities are not projected to incur any costs to comply with the proposed rule because they are among the facilities covered by the low flow exclusions. (See Section XII for discussion of the low flow exclusions.) The projected number of closures is very small compared to the large number of facilities owned by small entities. Less than one-half of one percent of the facilities owned by small

entities that are operating in the baseline are projected to close. The percentage of small entities experiencing moderate impacts is also low, at one percent. In regard to the baseline closure analysis, to put this information in context, data on facility start-ups and closures from the Census *Statistics of U.S. Businesses* indicate that between 6 and 12 percent of facilities in the major metal products manufacturing industries close in any

given year. (See discussion in Chapter 5 of the Economic, Environmental, and Benefits Analysis.)

iii. Impacts on Small Governments

For small governments, EPA relied on the analysis described in Section XVI.B.3.c. EPA estimates that there are 2,672 facilities owned by small governments. The low flow exclusion in today's proposed rule will exclude 2,262 of these small government-owned

MP&M facilities. Thus, the proposed rule covers 410 small government-owned facilities. Of these facilities, only 270 incur costs, and the average cost per facility is less than \$10,000. The total compliance cost for all the small government-owned facilities incurring costs under today's proposed rule is \$2.7 million. Only 140 of the 270 facilities have costs greater than 1 percent of baseline cost of service (measured as total facility costs and expenditures, including operating, overhead and debt service costs and expenses). EPA estimated no significant impacts for any of these facilities, based on three budgetary criteria (*i.e.*, impacts on site-level cost of service, impacts on taxpayers, and impact on government debt levels) as described in Section XVI.B.3.c. Thus, EPA concluded that none of the affected governments are expected to incur significant budgetary impacts as a result of the proposed rule.

d. Alternatives to the Proposed Rule

EPA sought from the outset to design a regulation that would not unreasonably burden small entities. In particular, EPA considered a number of regulatory alternatives for indirect and direct dischargers, and conducted extensive analysis of wastewater flow exclusions. As detailed in Section XII of this notice, EPA selected a regulatory alternative that incorporates low flow exclusions for several subcategories. The primary alternatives to the proposal, while providing additional pollutant reductions, also increased the number of small entities covered. These alternatives would have resulted in additional small entity impacts. The results from the closure analysis and the cost-to-revenue analysis for these alternatives are included in the IRFA, but are not summarized in this section of today's notice. As a result of selecting the low flow exclusions, the proposed rule imposes substantially lower impacts on small entities than the other options. In particular, the low flow exclusion for indirect discharging facilities in two subcategories—the General Metals subcategory and the Oily Wastes subcategory—played a significant role in minimizing small business impacts. EPA estimates that there are over 26,000 facilities in the General Metals subcategory and over 28,000 in the Oily Wastes subcategory operating in the baseline, and that small entities comprise a large portion of these subcategories. The low flow exclusion for both of these subcategories will largely reduce the number of small entities affected by the MP&M proposed rule. For the General Metals subcategory, EPA is proposing a 1 MGY

flow cutoff for the reasons explained in Section XII.D. This low flow exclusion reduces the number of regulated facilities in this subcategory by 75 percent. The facilities that comprise the 75 percent are mostly small entities and represent only 6 percent of the total pollutants discharged by the facilities in this subcategory. For the Oily Wastes subcategory, EPA is proposing a 2 MGY flow cutoff for the reasons explained in Section XII. This low flow exclusion reduces the number of regulated facilities in this subcategory by 96 percent. The facilities that comprise the 96 percent are mostly small entities and represent 39 percent of the total pollutant discharged by the facilities in this subcategory. In Section XII, EPA presented its rationale for concluding that national pretreatment standards were not warranted for facilities discharging less than 2 MGY in this subcategory.

EPA considered and incorporated other types of alternatives, such as monitoring alternatives. These are summarized below and discussed more fully in Sections XXI.C and XXI.D of today's notice.

e. Reporting, Record Keeping and Other Compliance Requirements

There are five areas for which EPA is proposing to require, or considering requiring, reporting or record keeping by MP&M facilities: (1) Certification to waive monitoring for pollutants that are not present; (2) certification and implementation of an organic chemicals management plan in lieu of monitoring for organic pollutants; (3) demonstration of a correlation to a site-specific organic pollutant indicator parameter; (4) certification of a total sulfide monitoring waiver for indirect dischargers; and (5) demonstration of specified pollution prevention practices and compliance with existing regulations in lieu of compliance with the MP&M effluent guidelines for facilities in the Metal Finishing Job Shop subcategory and some facilities in other subcategories. In all cases, EPA believes the collection of information, reporting, or record keeping is an alternative (*i.e.*, voluntary) that will allow a reduction in overall burden to facilities since EPA intends for these activities to reduce or eliminate effluent sampling and analysis costs. Each of these five areas is briefly described below and is described in detail in section XXI, and the associated burden is discussed in section XXII.A.

Briefly, for the certification to waive monitoring for pollutants that are not present, EPA expects that facilities will need to review analytical sampling data and other technical information

required to make the certification (*e.g.*, raw material inventory logs, production information, product chemistry, and reports on source water). There is some additional effort required to prepare the certification statement one time per permit cycle (*i.e.*, every 5 years). EPA is allowing the use of historical sampling data as well as sampling data generated for compliance reports required by the General Pretreatment Standards (40 CFR 403.12) in the development of the certification statement. Therefore, EPA does not anticipate additional monitoring burden associated with this waiver, particularly in comparison to the periodic compliance monitoring that is being replaced by this waiver. A wastewater treatment operator or other qualified facility personnel who is familiar with the facility's processes, products and analytical monitoring reports can make the determination.

In terms of the certification and implementation of an organic chemicals management plan in lieu of monitoring for organic pollutants, facilities choosing to develop an organic pollutant management plan must certify that the procedures described in the plan are being implemented at the facility. EPA notes that development and implementation of the plan would likely require the attention of the wastewater treatment operator or plant manager. EPA believes that facilities covered by the Metal Finishing effluent guidelines (40 CFR part 433) with a solvent management plan in place under those regulations will only have to update their plan.

EPA is considering (but is not proposing) allowing the demonstration of a correlation to a site-specific organic pollutant indicator parameter as an alternate approach to the use of an organic indicator parameter (see section XXI.C.2 for a discussion on the proposed organic indicator). In this case, there would be some additional reporting and record keeping. Facilities would need to perform testing, analyze analytical results, and keep records that demonstrate a correlation between the regulated organic pollutants and the selected indicator parameter. EPA notes that direct dischargers may incur less burden than indirect dischargers because they typically have more advanced treatment in place and permit writers typically require them to monitor for the types of parameters that EPA is considering as indicators (*e.g.*, COD, Oil & Grease, TOC, and TPH); therefore, they may already have data available that demonstrates a correlation to the regulated organic pollutants. A wastewater treatment operator or other qualified facility personnel who is

familiar with the facility's processes, products, and analytical monitoring reports should be able to make the determination. Some facilities may prefer consultation with an analytical chemist.

EPA is proposing to set numerical limitations on the discharge of total sulfide from facilities in several subcategories. In an effort to reduce monitoring burden on indirect dischargers, EPA is considering (but not proposing) to allow a waiver for the monitoring of total sulfide (even when present). EPA would require this demonstration one time per permit cycle and if no major changes in processes or raw materials change during that period, the demonstration would not have to be repeated for the next permit cycle. A wastewater treatment operator or other qualified facility personnel who is familiar with the facility's processes, products, and analytical monitoring reports can make the determination.

Finally, EPA is considering, but not proposing, whether to allow certain facilities in the Metal Finishing Job Shop subcategory to demonstrate compliance with specified pollution prevention and water conservation practices (in addition to maintaining compliance with the existing Metal Finishing and Electroplating effluent guidelines) in lieu of meeting the requirements of the MP&M regulation. Facilities would submit certification statements one time initially (by the compliance deadline) and twice per year thereafter for indirect dischargers, or once per year for direct dischargers. The compliance paperwork necessary to implement this alternative would likely require the attention of the wastewater treatment operator or plant manager.

f. Overlapping Federal Rules

EPA has established effluent guidelines regulations for thirteen industrial categories which may perform operations that are sometimes found in MP&M facilities. These effluent guidelines are:

- Electroplating (40 CFR part 413);
- Iron and Steel Manufacturing (40 CFR part 420);
- Nonferrous Metals Manufacturing (40 CFR part 421);
- Ferroalloy Manufacturing (40 CFR part 424);
- Metal Finishing (40 CFR part 433);
- Battery Manufacturing (40 CFR part 461);
- Metal Molding and Casting (40 CFR part 464);
- Coil Coating (40 CFR part 465);
- Porcelain Enameling (40 CFR part 466);

- Aluminum Forming (40 CFR part 467);
- Copper Forming (40 CFR part 468);
- Electrical and Electronic Components (40 CFR part 469); and
- Nonferrous Metals Forming and Metal Powders (40 CFR part 471).

In 1986, the Agency reviewed coverage of these regulations and identified a significant number of metals processing facilities discharging wastewater that these 13 regulations did not cover. As discussed above, EPA's "Preliminary Data Summary for the Machinery Manufacturing and Rebuilding Industry" (EPA 440/1-89/106) identified the MP&M industry as one that is discharging hazardous wastes to publicly owned treatment works and directly into the nation's surface waters.

EPA recognizes that in some cases, unit operations performed in industries covered by the existing effluent guidelines are the same as unit operations performed at MP&M facilities. In general, when unit operations and their associated wastewater discharges are already covered by an existing effluent guideline, they will remain covered under that effluent guideline. However, for the existing Electroplating (40 CFR part 413) and Metal Finishing (40 CFR part 433) effluent guidelines most facilities will be covered by this proposal. EPA is proposing to replace the existing Electroplating (40 CFR part 413) and Metal Finishing (40 CFR part 433) effluent guidelines with the MP&M regulations for all facilities in the Printed Wiring Board subcategory, all facilities in the Metal Finishing Job Shop subcategory, and for direct discharging facilities in the Non-Chromium Anodizers subcategory. (See Section VI.C for a discussion of subcategory-specific applicability).

When a facility covered by an existing metals effluent guidelines (other than Electroplating or Metal Finishing) discharges wastewater from unit operations not covered under that existing metals guideline but covered under MP&M, the facility will need to comply with both regulations. In those cases, the permit writer or control authority (e.g., Publicly Owned Treatment Works) will combine the limitations using an approach that proportions the limitations based on the different in-scope production levels (for production-based standards) or wastewater flows. POTWs refer to this approach as the "combined wastestream formula" (40 CFR 403.6(e)), while NPDES permit writers refer to it as the "building block approach." Permit writers and local control authorities

currently issue permits and control mechanisms for many facilities in other effluent guidelines categories where overlaps with more than one effluent limitation guidelines regulation occur (e.g., Organic Chemicals, Plastics, and Synthetic Fibers; Pesticide Manufacturing; Pesticide Formulating, Packaging and Repackaging; and Pharmaceutical Manufacturing). See Section III.D of this preamble for additional discussion of applicability.

2. Small Business Advocacy Review Panel

As required by section 609(b) of the RFA, as amended by SBREFA, EPA also conducted outreach to small entities and convened a Small Business Advocacy Review Panel to obtain advice and recommendations of representatives of the small entities that potentially would be subject to the rule's requirements. The Panel consisted of representatives from three Federal agencies: EPA, the Small Business Administration, and the Office of Management and Budget. The Panel reviewed materials EPA prepared in connection with the IRFA, and collected the advice and recommendations of small entity representatives. For this proposed rule, the small entity representatives included nine small MP&M facility owner/operators, one small municipality, and the following six trade associations representing different sectors of the industry: National Association of Metal Finishers (NAMF)/Association of Electroplaters and Surface Finishers (AESF)/MP&M Coalition; the Association Connecting Electronics Industries (also known as IPC); Porcelain Enamel Institute; American Association of Shortline Railroads (ASLRA); Electronics Industry Association (EIA); and the American Wire Producers Association (AWPA). Prior to and following the convening of the Panel, EPA and the other members of the Panel sought to gather advice and recommendations by meeting and consulting with the small entity representatives listed above. On September 16, 1999 and October 5, 1999, EPA held pre-Panel meetings with the potential small entity representatives to provide background information on the MP&M regulation and EPA's regulatory process and to provide detailed information on the elements of the IRFA including possible regulatory alternatives. After EPA's Small Business Advocacy Chair convened the Panel on December 8, 1999, the Panel provided over 300 pages of background information and analysis to the small entity representatives and met with the representatives on

December 17, 1999 and January 7, 2000. The Panel asked the small entity representatives to submit written comment on the MP&M rulemaking in relation to the elements of the IRFA. The Panel carefully considered these comments when developing its recommendations.

Consistent with the RFA/SBREFA requirements, the Panel evaluated the assembled materials and small-entity comments on issues related to the elements of the IRFA and prepared a report. The report summarizes the Panel's outreach efforts to small entities and the comments submitted by the small entity representatives. The Panel's report also presents their findings on issues related to the elements of an IRFA and recommendations regarding the rulemaking. EPA included a copy of the Panel report in the docket for this proposed rule.

In the area of potential reporting, record keeping and compliance requirements, the Panel recommended that EPA consider reduced monitoring schemes for small entities including incorporating several concepts of the proposed EPA NPDES Streamlining regulations ("Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations: Round 2; Proposed Rule" 61 FR 65268; December 11, 1996). For example, the Panel "encourages EPA to explore options for allowing certification in lieu of monitoring where an operator can determine, based on knowledge of the facility and its processes, that certain pollutants are not likely to be present or are adequately controlled." Based on the Panel's recommendations, EPA is proposing to allow MP&M indirect discharge facilities to apply for a waiver that will allow them to reduce their monitoring burden. In order for a facility to receive a monitoring waiver, the facility must submit a certification statement in writing to the control authority (e.g., POTW) stating that the facility does not use nor generate in any way a pollutant (or pollutants) at their site or that the pollutant (or pollutants) is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. EPA notes that the NPDES streamlining for direct dischargers, which includes a similar provision, was finalized on May 15, 2000 (65 FR 30886).

The Panel also recommended that EPA give serious consideration to allowing the use of best management practices (BMPs) instead of numerical limitations, at least for some pollutants and/or subcategories of facilities. In

response to this recommendation, EPA is soliciting comment and data on a "Pollution Prevention Alternative for the Metal Finishing Job Shop Subcategory." This alternative would allow facilities in the Metal Finishing Job Shop subcategory to implement a set of pollution prevention measures in lieu of monitoring for a set of regulated parameters. The Agency is also soliciting comment on allowing facilities in other subcategories to comply with this pollution prevention alternative. EPA fully describes this potential alternative in Section XXI.D.

In relation to proposing an indicator for toxic organic constituents to reduce the burden of monitoring for specific organic pollutants, the Panel recommended that EPA attempt to identify an appropriate organic indicator if it turns out that limitations for organic pollutants are appropriate for one or more subcategories. However, the Panel also recommended that if organic pollutant removals by subcategory are not higher than levels in the preliminary analysis provided to the Panel, then EPA should give serious consideration to not proposing pretreatment standards for those pollutants in those subcategories. In response to this recommendation, the Agency is proposing several alternatives for organic pollutant monitoring. EPA is proposing to allow the use of Total Organic Carbon (TOC) as an indicator parameter for organic pollutants found in the wastewater discharges at MP&M facilities. The indicator is an alternative limit. If facilities do not wish to use TOC as an indicator, EPA is proposing two other alternatives. The second alternative allows facilities to monitor for a list of organic pollutants (i.e., total organics parameter (TOP) list) and to meet a limit which would equate to the summation of all quantifiable values of the listed organic pollutants. The third alternative allows facilities to develop and certify the implementation of an "organic chemical management plan." The Agency further discusses these organic monitoring alternatives in Section XXI.C.

The Panel also recommended that EPA not regulate TSS, pH, iron, or aluminum for indirect dischargers. The Agency is not proposing pretreatment standards for any of these parameters.

In the area of overlap with other Federal rules, the Panel recommended that EPA attempt to minimize the potential for MP&M facilities to be covered by more than one effluent guideline and that EPA clarify in the preamble how it plans to regulate facilities that have operations covered by more than one effluent guideline. In

response to this recommendation, EPA has made an effort to clearly define the applicability of the proposed MP&M rule. In addition, EPA is replacing the Metal Finishing (40 CFR part 433) and Electroplating (40 CFR part 413) effluent guidelines for a large number of facilities. Therefore, these facilities will only be covered by the MP&M rule.

The Panel recommended that EPA consider regulatory alternatives, including a "no regulation" option, to reduce any significant economic impacts that are not justified by environmental improvements and to improve the cost-effectiveness of the regulation. In response to these recommendations, the Agency is proposing low flow exclusions for two subcategories and is proposing not to establish pretreatment standards for three other subcategories based on low levels of pollutants discharged. EPA discusses these issues throughout this notice (see Sections II.D, VI.C, and XII for detailed discussions of the proposed flow cutoff (or no regulation) by subcategory).

Additionally, as recommended by the Panel, EPA has solicited data and comment on the following topics discussed in the Panel report: the cost savings to Control Authorities and dischargers of BMPs in lieu of numerical limitations; in-process versus end-of-pipe monitoring for cyanide; inclusion of the steel wire producers in the proposed rule; costs for contract hauling; certain methodological issues, including costs and adequacy of operational changes or treatment enhancements for BAT facilities to consistently and reliably achieve full compliance with proposed limitations; the POTW removals methodology; and the revision to the Toxic Weighting Factors. EPA invites comments on all aspects of the proposal and its impacts on small entities (see Section XXIII for a specific request for comment on each of these issues).

D. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or

State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action." As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The rule establishes effluent limitations imposing requirements that apply to metal product and machinery facilities, as defined by this preamble, when they discharge wastewater. The rule applies to States and localities when they own and operate an in-scope MP&M facility. EPA estimates 4,300 MP&M facilities are owned and operated by State and local governments. Only 730 of these 4,300 facilities discharge MP&M process wastewater at levels above the flow exclusions for the General Metals and Oily Wastes subcategories (1 MGY and 2 MGY, respectively).

In addition, this proposed rule will affect State and local governments when they are administering CWA permitting programs. The proposed rule, at most, imposes minimal administrative costs on States that have an authorized

NPDES program. (These States must incorporate the new limitations and standards in new and reissued NPDES permits). In an effort to minimize this administrative burden, EPA has incorporated a low flow cutoff for indirect dischargers in the two largest subcategories (*i.e.*, General Metals and Oily Waste) to reduce permitting burden on POTWs related to permitting the smallest MP&M facilities (see Sections II.D, VI.C, and XII for discussions on the proposed low flow exclusion). The total cost of today's proposal to governments (including regulated MP&M government-owned facilities and regulators) is less than \$15 million. Thus, Executive Order 13132 does not apply to this rule. See Section XXII.B for a discussion of the administrative costs to State and local governments.

Although Executive Order 13132 does not apply to this rule, EPA did consult with State and local government representatives in developing this proposal. EPA developed and administered a survey questionnaire to collect information from POTWs on the burden of implementing permits for MP&M facilities (see Section V.B.5 for a information on the POTW survey questionnaire). In addition, EPA attended several industry and professional meetings such as the National Metal Finishing Strategic Goals Summit and the annual meetings of the Association of Municipal Sewerage Authorities (AMSA) to talk to States and local governments (and other stakeholders) about the MP&M proposed rule including several possible alternative options for monitoring. States and local government representatives were also present at EPA's public meetings on the MP&M proposed rule (see Section V.E of this notice for a discussion on public outreach efforts). Section II.D summarizes many of the major concerns expressed by MP&M stakeholders (including State and local governments) during the development of this proposal.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

F. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

1. E.O. 12898 Requirements

Executive Order 12898 requires that, to the greatest extent practicable and

permitted by law, each Federal agency must make achieving environmental justice part of its mission. E.O. 12898 provides that each Federal agency must conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin.

2. Environmental Justice Analysis

EPA examined whether the proposed regulation will promote environmental justice in the areas affected by MP&M discharges. This analysis first examines whether the proposed rule specifically reduces risks to disadvantaged populations. EPA then examined whether MP&M discharges have a disproportionately high environmental impact on minority populations based on the demographic characteristics of the populations residing in the counties affected by MP&M discharges.

a. Changes in Health Risk for Subsistence Anglers

Subsistence anglers include low-income and minority populations that rely heavily on subsistence fishing in their food supply. Subsistence anglers are likely to be at disproportionately high risk from consumption of contaminated fish because of heavy reliance on fish caught in local waters in their diets. EPA's analysis of changes in adverse health effects from the proposed rule show that benefits to subsistence anglers substantially exceed benefits to recreational anglers.

EPA used the same methodology for estimating cancer and systemic health risk used in the national human health benefits analysis to estimate changes in health risk to subsistence anglers. EPA's estimates show that subsistence anglers face significantly higher cancer risk from fish consumption than recreational anglers at the baseline discharge levels. The estimated average lifetime cancer risk in the baseline for subsistence and recreational anglers is 20.3 in a million and 8.08 in a million, respectively. The estimated reduction in average lifetime cancer risk for subsistence anglers is more than double the reduction in risk for sport anglers (*i.e.*, 7.70 in a million vs. 3.77 in a million) (see Table XXII.F-1).

TABLE XXII.F-1.—ESTIMATED CHANGES IN LIFETIME CANCER RISK TO SUBSISTENCE VS. RECREATIONAL ANGLERS

Exposed population category	Average lifetime cancer risk per individual				Estimated changes in individual lifetime cancer risk		
	Baseline	Proposed option	Option 2/6/10	Option 4/8	Proposed option	Option 2/6/10	Option 4/8
Subsistence Anglers	20.3E-06	12.6E-06	12.4E-06	12.8E-06	7.7E-06	7.9E-06	7.5E-06
Recreational Anglers	8.1E-06	4.3E-06	4.3E-06	4.5E-06	3.8E-06	3.8E-06	3.6E-06

EPA also analyzed changes in systemic health risk from fish consumption to subsistence anglers. This analysis is performed at the sample level only. The results from this analysis show that approximately 7,000

subsistence anglers (two percent) in reaches near sample facilities are estimated to ingest MP&M pollutants at rates sufficient to pose a significant risk of health effects at the baseline discharge levels. The proposed

regulation reduces the number of subsistence anglers at risk of developing deleterious health effects by 4,616 (66 percent) (see Table XXII.F-2.).

TABLE XXII.F-2.—CHANGES IN SYSTEMIC HEALTH RISK TO SUBSISTENCE ANGLERS (SAMPLE BASIS)

Regulatory status	Total exposed subsistence anglers	Subsistence anglers exposed to hazard ratio >1 ^a		Subsistence anglers benefitting from the MP&M rule	
		Number of individuals	Percent of total exposed individuals	Number of individuals	Percent of baseline
Baseline	320,366	6,971	2.18	.....	.....
Proposed option	320,366	2,355	0.74	4,616	66
Option 2/6/10	320,366	2,355	0.74	4,616	66
Option 4/8	320,366	2,355	0.74	4,616	66

^a Hazard ratio is a ratio of the estimated ingestion rate of a pollutant to the reference dose (RfD) value for the pollutant. The RfD is an estimate of the maximum daily ingestion rate in mg/kg per day that is likely to be without an appreciable risk of deleterious effects during a lifetime. A hazard ratio greater than one indicates that individuals would be expected to ingest MP&M pollutants at rates sufficient to pose a significant risk of systemic health effects.

b. Demographic Characteristics of the Populations Residing in the Counties Affected by MP&M Discharges

EPA assessed whether adverse environmental, human health, or economic effects associated with MP&M facility discharges are more likely to be borne by minorities and low-income populations. This analysis is based on information on the race, national origin, and income level of populations residing in the counties traversed by reaches receiving discharges from 885 sample MP&M facilities. The analysis was not done at the national level. The 885 sample facilities are located in 643 counties in 46 States (excluding Alaska, Hawaii, Nevada, and Wyoming). Two sample facilities that are located in Puerto Rico were excluded from this analysis due to insufficient data.

EPA compared demographic data on the counties traversed by sample MP&M reaches with the corresponding state-level indicators. The results of this analysis show that counties affected by MP&M discharges tend to have a larger proportion of African-American population than the State average in 41 States. In five States, the proportion of African-Americans in MP&M counties corresponds to the State averages (District of Columbia, North Carolina,

South Carolina, Vermont, and West Virginia). Other socioeconomic characteristics of the populations residing in the counties abutting reaches affected by MP&M discharges reflect the corresponding State averages.

3. Findings

Findings from the EPA's analysis show that this proposed rule is expected to promote environmental justice in the areas affected by MP&M discharges. EPA's analysis of changes in adverse health effects from the proposed rule indicate that health benefits to 3.8 million subsistence anglers substantially exceed benefits to recreational anglers. The estimated reduction in annual cancer risk is an order of magnitude greater for subsistence than for sport anglers (*i.e.*, 0.5 in one hundred million vs 0.5 in one billion). The proportion of subsistence anglers that face a hazard ratio of greater than one under the baseline conditions (2.2 percent) declines by 1.5 percent due to the proposed rule (see Table XXII.F-2). [Note: the hazard ratio is a ratio of the estimated ingestion rate of a pollutant to the reference dose (RfD) value point. A hazard ratio greater than one indicates that individuals would be expected to ingest MP&M pollutants at rates

sufficient to pose a significant risk of systemic health effects.] A much smaller proportion of recreational anglers (0.15 percent) is expected to suffer from systemic health risk effects under the baseline conditions. The percentage of recreational anglers facing a hazard ratio of one drops to 0.05 percent under the post-compliance. Higher representation of African-American households in the areas where most MP&M sample facilities are located and their effluents are released indicates that the disadvantaged populations will receive a relatively larger share of the benefits from the MP&M rule, though they may also bear a disproportionate share of costs if the MP&M facilities that close are in their community (*e.g.*, lost jobs).

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

1. E.O. 13045 Requirements

The Executive Order "Protection of Children From Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a

disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. This proposed rule is subject to the Executive Order because it is an economically significant regulatory action as defined by E.O. 12866. It is expected to reduce numerous pollutants, including lead, in fish tissue and drinking water that exceed human health criteria for consumption of water and organisms and organisms only. Therefore, EPA has performed an analysis of children's health impacts reduced by this proposed rule.

2. Analysis of Children's Health Impacts

EPA expects that the proposed regulation will benefit children in many ways, including reducing health risk from exposure to MP&M pollutants from consumption of contaminated fish tissue and drinking water and improving recreational opportunities. The Agency was able to quantify only one category of benefits to children, however—avoided health damages to pre-school age children from reduced exposure to lead. This analysis

considered several measures of children's health benefits associated with lead exposure for children up to age six. Avoided neurological and cognitive damages were expressed as changes in three metrics: (1) Overall IQ levels, (2) the incidence of low IQ scores (<70), and (3) the incidence of blood-lead levels above 20 mg/dL. The Agency also assessed changes in incidence of neonatal mortality from reduced maternal exposure to lead. EPA's methodology for assessing benefits to children and adults is presented in Section XX.B.3.c. This analysis showed that the proposed rule is expected to yield \$14.4 million (1999\$) in annual benefits to children from reduced neurological and cognitive damages and reduced incidence of neonatal mortality.

The Agency also examined whether lead discharges from MP&M facilities are likely to have a disproportionate impact on children in subsistence anglers' families. Children in subsistence fishing families face a greater risk of adverse health effects from exposure to lead-contaminated fish due to high proportion of fish from local waters in their diet. EPA's analysis showed that the beneficial outcome of the MP&M rule favor children from subsistence fishing families. The average estimated health risk reduction

per child for each of the four lead-related health effects was much larger for children from subsistence fishing families. This finding is also supported by the monetary estimates of benefits per child in each population category. EPA estimated that the monetary value of benefits to a child from a subsistence fishing family is \$781.2 (1999\$) per year, as compared to \$82.6 (1999\$) for a child from a recreational fishing family. These benefits comprise a much larger portion of subsistence fishing families income compared to the benefits received by a recreational fishing because subsistence fishing families (e.g., Native American families) have on average a lower household income. EPA estimated that the monetary value of benefits from reduced cognitive damages to children for a subsistence household is about 2.9 percent of their current household income, while benefits for a recreational fishing family is 0.2 percent of their household income. This analysis uses average household income in Native American families and average household income of all households in the United States. Table XXII.G-1 summarizes estimated changes in health risk and the monetary value of benefits to children from recreational and subsistence fishing families.

TABLE XXII.G-1.—ESTIMATED BENEFITS TO PRE-SCHOOL CHILDREN FROM REDUCED EXPOSURE TO LEAD

Benefit category	Population category	Number of children (ages 0 to 1)	Reduction in the number of adverse health effect cases	Estimated monetary value of avoided health damages to children (1999\$)—mean estimates	
				Total	Per child
Preferred Option					
Neo-Natal Mortality	Recreation .....	.....	0.92	\$5,536,000	\$47
	Subsistence .....	.....	0.69	\$4,002,000	\$609
Avoided IQ Loss	Recreation .....	.....	390.43	\$3,934,410	\$30
	Subsistence .....	.....	98.65	\$994,104	\$151
Reduced IQ <70	Recreation .....	.....	0.02	\$101,311	\$1
	Subsistence .....	.....	0.09	\$25,079	\$4
Reduced PbB >20	Recreation .....	.....	0.03	\$686	(¹)
	Subsistence .....	.....	0.06	\$60	(¹)
Total	Recreation	131,511	.....	\$9,372,407	\$83
	Subsistence	6,576	.....	\$5,021,243	\$764
	All Children	138,087	.....	\$14,393,650	\$120
Option 2/6/10					
Neo-Natal Mortality	Recreation .....	.....	0.95	\$5,510,000	\$49
	Subsistence .....	.....	0.71	\$4,118,000	\$626
Avoided IQ Loss	Recreation .....	.....	402.75	\$4,058,465	\$31
	Subsistence .....	.....	101.74	\$1,025,276	\$156
Reduced IQ <70	Recreation .....	.....	0.02	\$104,529	\$1
	Subsistence .....	.....	0.09	\$25,866	\$4
Reduced PbB >20	Recreation .....	.....	0.03	\$609	(¹)
	Subsistence .....	.....	0.04	\$36	(¹)
Total	Recreation	131,511	.....	\$9,546,407	\$84
	Subsistence	6,576	.....	\$5,013,243	\$781

TABLE XXII.G-1.—ESTIMATED BENEFITS TO PRE-SCHOOL CHILDREN FROM REDUCED EXPOSURE TO LEAD—Continued

Benefit category	Population category	Number of children (ages 0 to 1)	Reduction in the number of adverse health effect cases	Estimated monetary value of avoided health damages to children (1999\$)—mean estimates	
				Total	Per child
	All Children	138,087	.....	\$14,683,650	\$122
Option 4/8					
Neo-Natal Mortality	Recreation .....	.....	0.95	\$5,510,000	\$49
	Subsistence .....	.....	0.71	\$4,118,000	\$626
Avoided IQ Loss	Recreation .....	.....	402.75	\$4,058,465	\$31
	Subsistence .....	.....	101.74	\$1,025,276	\$156
Reduced IQ <70	Recreation .....	.....	0.02	\$104,529	\$1
	Subsistence .....	.....	0.09	\$25,866	\$4
Reduced PbB >20	Recreation .....	.....	0.03	\$609	(¹)
	Subsistence .....	.....	0.04	\$36	(¹)
Total	Recreation	131,511	.....	\$9,673,603	\$85
	Subsistence	6,576	.....	\$5,169,178	\$786
	All Children	138,087	.....	\$14,842,781	\$124

¹ Negligible.

Children over age six are also likely to benefit from reduced neurological and cognitive damages due to reduced exposure to lead. Recent research on brain development among 10-to 18-year-old children shows unanticipated and substantial growth in brain development, mainly in the early teenage years (Giedd *et al.*, 1999). This research suggests that older children may be hypersensitive to lead exposure, as are children aged 0 to 6.

Additional benefits to children from reduced exposure to lead not quantified in this analysis may include prevention of the following adverse health effects: slowed or delayed growth, delinquent and anti-social behavior, metabolic effects, impaired heme synthesis, anemia, impaired hearing, and cancer.

H. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian Tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the Tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected Tribal governments, a

summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian Tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's rule does not significantly or uniquely affect the communities of Indian Tribal governments. Based on the information collection efforts for this industry category, EPA does not expect any Indian Tribal governments to own or operate in-scope MP&M facilities. In addition, given the proposed applicability thresholds (*i.e.*, low flow exclusions for the General Metals and Oily Wastes subcategories), EPA estimates that few, if any, new facilities subject to the rule will be owned by Tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, (Pub L. 104-113 Sec. 12(d) 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods,

sampling procedures, business practices) that are developed or adopted by voluntary consensus standard bodies. The NTTAA directs EPA to provide Congress, through the Office of Management and Budget (OMB), explanations when the Agency decides not to use available and applicable voluntary consensus standards.

Although today's proposed rule does not establish new analytical methods, it does require dischargers to monitor for TSS, O&G (as HEM), Total Organic Carbon (TOC), Aluminum, Cadmium, Chromium, Copper, Cyanide (T), Cyanide (A), Lead, Manganese, Molybdenum, Nickel, Silver, Sulfide (as S), Tin, and Zinc. (EPA notes that the pollutants listed may not be regulated for all subcategories). All of these analytes can be measured by EPA methods and many using consensus standards that are specified in the tables at 40 CFR part 136.3. EPA is also proposing a limit for Total Organics Parameter (TOP), as part of an organic monitoring alternative. (See Section XXI.C.2). EPA developed the TOP list of organic pollutants using the list of organic priority pollutants and other non-conventional organic pollutants that met EPA's "pollutant of concern" criteria for this rule (see section VII for a discussion on the selection of the MP&M pollutants of concern). Of the nonconventional organic chemicals on the MP&M pollutant of concern list, EPA included only those that were removed in appreciable quantities (based on toxic weighted pound-equivalents) in two or more subcategories. See appendix B to part 438 in the proposed rule accompanying

this notice for a list of organic pollutants that comprise the proposed Total Organics Parameter (TOP). The following analytes that EPA is proposing to comprise the TOP do not have approved EPA methods: Benzoic acid, carbon disulfide, 3,6-Dimethylphenanthrene, 2-Isopropyl-naphthalene, 1-Methylfluorene, and 2-Methylnaphthalene. In addition, aniline and 1-Methylphenanthrene do not have procedures approved in 40 CFR part 136, but have procedures that have been validated as attachments to EPA Methods 1625/625. EPA plans to promulgate methods or validate the procedures for these analytes prior to the promulgation of the MP&M rule. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

J. Plain Language Directive

Executive Order 12866 and the President's memorandum of June 1, 1998, require each agency to write all rules in plain language. We invite your comments on how to make this proposed rule easier to understand. For example, have we organized the material to suit your needs? Are the requirements in the rule clearly stated? Does the rule contain technical language or jargon that isn't clear? Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand? Would more (but shorter) sections be better? Could we improve clarity by adding tables, lists, or diagrams? What else could we do to make the rule easier to understand?

K. Executive Order 13158: Marine Protected Areas

1. E.O. 13158 Requirements

Executive Order 13158 has been established to "help protect the significant natural and cultural resources within the marine environment for the benefit of present and future generations by strengthening and expanding the Nation's system of marine protected areas (MPAs)." MPAs include areas of coastal and ocean waters, the Great Lakes and their connecting waters that have been reserved by laws or regulations to provide lasting protection for part or all of their natural resources. The list of MPAs defined for the purposes of this Executive Order will be published and maintained by the Secretary of

Commerce and the Secretary of the Interior.

This order aims at further enhancing and strengthening protection of the existing MPAs and establishing new or expanded MPAs. The order provides EPA with the ability to propose new science-based regulations, as necessary, to ensure better protection for beaches, coasts, and the marine environment from pollution.

2. Impacts on Marine Resources

The proposed regulation is expected to enhance protection of MPAs by improving the quality of marine waters receiving discharges from MP&M facilities. Although the list of MPAs affected by this order has not yet been published, may include waterbodies currently protected under the National Estuaries Program (NEP), wildlife refuges, and other significant natural and cultural resources in marine environments. EPA compared sample MP&M facility discharge locations with the list of the 28 waterbodies under the NEP and the Chesapeake Bay to assess potential impacts of the regulation on significant marine resources. Sample MP&M facilities included in this analysis discharge directly or indirectly to 627 receiving waterways, of which, 544 are rivers/streams, 55 are bays or estuaries, and 28 are lakes, including the Great Lakes. This analysis showed that several of the NEP waterbodies currently receive discharges from the sample facilities, including Long Island Sound (NY/CT), Buzzards Bay (MA), Narragansett Bay (RI), and Puget Sound (WA). Most of the other protected estuaries receive effluents from the sample MP&M facilities via connecting waters. For example, discharges to the Connecticut River enter Long Island Sound (NY/CT), and discharges to the Hudson River enter the New York-New Jersey Harbor.

The absence of the current MPA list makes it difficult to determine the extent of benefits to MPAs from the proposed rule. The breadth of this regulation, however, ensures that some MPAs are likely to benefit from reduced pollutant discharges from MP&M facilities.

L. Coastal Zone Act Reauthorization Amendments (CZARA)

Congress enacted Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) in 1990 to address the problem of nonpoint source pollution in coastal waters. Section 6217 of CZARA requires all States/tribes with federally approved coastal zone management programs to develop and implement coastal nonpoint pollution

control programs. The EPA and NOAA administer the Section 6217 program and have developed guidance to assist States in implementing the coastal nonpoint pollution control programs. States may choose the specific practice or combination of practices that will achieve the goals of controlling nonpoint source pollution and of protecting coastal waters.

Section 6217 of CZARA differs from the previous Coastal Zone Management Act (CZMA) of 1972 in that it is a mandatory program. Under CZMA the participation by States in coastal resource management was voluntary. CZARA requires coastal States/tribes to submit a coastal nonpoint pollution program to the EPA and NOAA within 30 months of the technical guidance issuance by EPA and NOAA (by July 1995).

The technical guidance provided by EPA and NOAA identifies five categories of nonpoint sources affecting coastal waters: Agriculture; forestry; urban runoff; marinas and recreational boating; and hydromodification. For each category, the technical guidance specifies management measures and practices to control nonpoint pollution. Management measures are defined in CZARA as economically achievable measures that reflect the best available technology to control the addition of pollutants to coastal waters.

Although today's proposed rule does not affect nonpoint sources directly, it may contribute to nonpoint source pollution control in coastal areas by improving the quality of sewage sludge. EPA estimates that 1.7 million dry metric tons of sewage sludge would be newly qualified for land application as a result of the proposed rule. Sewage sludge is a valuable source of fertilizer and can be applied to agricultural land, golf courses, sod farms, forests, and residential gardens. Compared to nitrogen in most chemical fertilizers, nitrogen in sewage sludge is relatively insoluble in water. If sewage sludge is used as a substitute for chemical fertilizers on agricultural land nonpoint source contamination of surface water can be reduced.

XXIII. Solicitation of Data and Comments

EPA invites and encourages public participation in this rulemaking. The Agency asks that comments address any perceived deficiencies in the record of this proposal and that suggested revisions or corrections be supported by data where possible. See Section XXIV for guidelines for submittal of data.

EPA particularly requests comments and information on the following issues:

1. Steel Forming & Finishing Facilities. EPA solicits comments on the choice to include the Steel Forming & Finishing facilities in today's proposed MP&M regulation. Facilities in this subcategory predominantly process steel wire, rod, bar, pipe, or tube. EPA previously regulated these sites under the 1982 Iron & Steel Manufacturing effluent guidelines (40 CFR part 420). However, based on the information gathered during the data collection effort for the Agency's proposed revision to the Iron & Steel Manufacturing regulations, EPA has determined that these facilities are more appropriately regulated by the MP&M proposed rule. (See Section VI.C.5 for a discussion of the proposed applicability of the Steel Forming & Finishing Subcategory). EPA is also interested in analytical sampling data to help better identify the raw wastewater characteristics and treatment performance of facilities in the proposed Steel Forming & Finishing subcategory. Please note the requirements for submitting paired influent and effluent data, as described in section XXIV.A.

In addition, for facilities that perform operations that fall within the proposed scope of both the MP&M Steel Forming & Finishing subcategory and the proposed Iron & Steel regulations (*i.e.*, a facility that performs manufacturing and batch electroplating of steel), EPA is soliciting comment on whether both regulations should cover these facilities (using the combined waste stream formula for indirect dischargers or building block approach for direct dischargers) or whether EPA should allow facilities that would fall under the scope of both regulations to be regulated only by the Iron & Steel Manufacturing rule. EPA notes that both the proposed regulations discussed here set mass-based limits for these facilities. If the Agency were to choose the later option, it would need to incorporate a wastewater flow allowance for the steel forming and finishing operations into the mass-based limits of the Iron & Steel regulation, where applicable. EPA is particularly interested in comments from permit writers and control authorities concerning the burden of permitting an Iron & Steel facility under two effluent guidelines (using the building block approach or combined waste stream formula) versus the expected complexity of interpreting the applicability statements when two regulations cover the same operations. In addition, EPA is interested in better understanding the potential economic advantage (or disadvantage) this might create between stand-alone steel

forming & finishing facilities and steel manufacturing facilities where steel forming & finishing operations occur.

2. P2 Alternative for Metal Finishing Job Shops subcategory. EPA solicits comment on all aspects of the Pollution Prevention Alternative for the Metal Finishing Job Shops subcategory including the list of practices as well as the possible format for the alternative (see Section XXI.D for a discussion of the P2 Alternative). More specifically, EPA requests comment on whether there are additional or different practices that should be listed, the number of practices that should be required in each category, the reasons why any of the practices may not be applicable to specific facilities or processes, the costs of implementing this compliance alternative, the pollutant reduction associated with this alternative, and whether EPA should offer this alternative to direct discharging facilities in the Metal Finishing Job Shops subcategory, only to facilities discharging below a specified wastewater discharge flow, other subcategories such as General Metals (even those not currently regulated by the Metal Finishing and Electroplating effluent guidelines), or at certain facilities in other subcategories (*e.g.*, captive metal finishing and electroplating shops).

EPA also requests comment on whether the Agency should (if the P2 Alternative is incorporated in the final rule) require all facilities that choose the P2 Alternative to also meet the pretreatment standards for the Metal Finishing effluent guidelines (40 CFR part 433). That is, should facilities that are currently covered by the Electroplating effluent guidelines (40 CFR part 413) have to meet the pretreatment standards for the Metal Finishing effluent guidelines or for the Electroplating effluent guidelines when choosing to comply with the P2 Alternative in lieu of the MP&M pretreatment standards? EPA is interested in receiving information on the additional costs that would be incurred by facilities currently covered by the Electroplating effluent guidelines in order to meet the pretreatment standards of the Metal Finishing effluent guidelines.

3. Monitoring Flexibility—Monitoring Waiver for Pollutants Not Present. In an effort to reduce monitoring burden on facilities, EPA is proposing to allow MP&M indirect discharge facilities to apply for a waiver that will allow them to reduce their monitoring burden. In order for a facility to receive a monitoring waiver, the facility must submit a certification statement in

writing to the control authority (*e.g.*, POTW) stating that the facility does not use, nor generate in any way, a pollutant (or pollutants) at their site and that the pollutant (or pollutants) is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. The facility must base this certification on sampling data or other technical factors and is not a waiver from including the numerical limit in the control mechanism (*i.e.*, permit) (see Section XXI.C.1 for a discussion on this monitoring waiver). EPA solicits comment on the language proposed for the monitoring waiver for MP&M indirect dischargers. EPA is also interested in receiving comment on the Agency's estimate of burden related to preparing and filing such a certification and the reduction in monitoring burden and associated cost savings that a facility would expect (see section XXII.A. for a discussion on the estimated burden).

4. Monitoring Flexibility—Organic Pollutant Monitoring. As discussed in Section XXI.C, EPA is proposing to allow the use of Total Organic Carbon (TOC) as an indicator parameter for organic pollutants found in the wastewater discharges at MP&M facilities. The indicator is an alternative limit. If facilities do not wish to use TOC as an indicator, EPA is proposing two other alternatives. The second alternative allows facilities to monitor for a list of organic pollutants (*i.e.*, total organics parameter (TOP) list) and to meet a limit which would equate to the summation of all quantifiable values of the listed organic pollutants. In any case where the data for these pollutants indicated a level below the minimum level (*i.e.*, below quantitation), EPA used the minimum level for the specific pollutant in the summation of the total organics parameter limit. Facilities will only have to monitor for those TOP chemicals that are reasonably present. The third alternative allows facilities to develop and certify the implementation of an "organic chemical management plan."

EPA solicits comment on the three alternatives being proposed for reducing the burden associated with monitoring for organic pollutants. EPA specifically solicits comment on the use of TOC as an indicator pollutant for the broad spectrum of organic pollutants found in MP&M process wastewater and whether EPA should require facilities that are not using the Agency's selected BAT technology to demonstrate a correlation between removal of TOC and removal of organic pollutants in their MP&M process wastewater.

EPA also requests comment on whether the Agency should allow facilities to choose an indicator pollutant from a given set of choices (e.g., COD, Oil & Grease (as HEM), TOC, Total Petroleum Hydrocarbons (as SGT-HEM), etc.) instead of specifying TOC as the only allowable indicator parameter. Facilities would be required to demonstrate that the reductions in the chosen indicator parameter are equivalent to the reduction in the organic constituents required by the limit that EPA is proposing for the "Total Organics Parameter" (TOP). EPA is also interested in receiving comment on the Agency's estimate of burden related to preparing an organic chemicals management plan and the reduction in monitoring burden and associated cost savings that a facility would expect in each of these suggested alternatives as compared to monitoring for the TOP list (see section XXII.A. for a discussion on the estimated burden).

5. Monitoring Flexibility—Total Sulfide Waiver. EPA is proposing to set numerical limitations on the discharge of Total Sulfide from facilities in the General Metals, Metal Finishing Job Shops, Printed Wiring Board, Steel Forming & Finishing, and Oily Waste subcategories. In an effort to reduce monitoring burden on indirect dischargers, EPA is considering to allow a waiver for the monitoring of total sulfide (even when present), at the discretion of the POTW, when a facility demonstrates that the sulfides will not generate acidic or corrosive conditions and will not create conditions that enhance opportunities for release of hydrogen sulfide gas in the sewer/interceptor collection system or at the receiving POTW or otherwise interfere with the operation of the POTW. EPA solicits comment on this alternative and the burden associated with demonstrating that it meets the specified conditions.

6. Oily Operations Wastewater. Facilities in the Oily Wastes subcategory must only discharge wastewater from one or more of the following MP&M unit operations: alkaline cleaning for oil removal, aqueous degreasing, corrosion preventive coating, floor cleaning, grinding, heat treating, impact deformation, machining, painting, pressure deformation, solvent degreasing, testing (e.g., hydrostatic, dye penetrant, ultrasonic, magnetic flux), steam cleaning, and laundering. If they discharge wastewater from any of the above listed operations but also discharge wastewater from other MP&M operations, they do not meet the criteria of the Oily Wastes subcategory. Facilities in this subcategory are

predominantly machine shops or maintenance and repair shops. Similarly, EPA is proposing to define the applicability of the Railroad Line Maintenance subcategory using the same set of "oily" unit operations with the addition of "washing of final product" at facilities that perform routine cleaning and light maintenance on railroad engines, cars, and car-wheel trucks and similar structures. EPA solicits comment on the list of "oily" unit operations and whether commenters prefer the use of a list of unit operations to define the applicability or a definition (related to low metals content of the wastewater). EPA also requests comment on whether there are additional MP&M unit operations that should be included in this list.

7. Possible Addition of Other Regulated Parameters. The list of parameters which EPA proposes to regulate under today's proposal are listed in the proposed codified rule that accompanies this preamble. EPA is soliciting comments and data on additional parameters that should be considered for regulation. There are two additional chemicals that EPA is considering for regulation under the MP&M rule: dithiocarbamates and carbon disulfide. Dithiocarbamates is a chemical structural group that refers to a set of chemicals, including sodium dimethyldithiocarbamate, that are used by facilities in the MP&M industry for treatment of chelated metals wastewater (often referred to as "DTC"). It can also be used as a reducing agent. Carbon disulfide can be formed during chelation breaking and other treatment steps. Although these chemicals are not used in the MP&M processes, they can be used/generated by the treatment of MP&M wastewater and may cause environmental impacts. EPA is specifically interested in data on the treatment of dithiocarbamates and carbon disulfide (including treatment effectiveness, treatment costs, costs of contract hauling of these wastewater) and on the environmental impacts that these chemicals may pose to aquatic life, human health, and POTWs.

In addition, EPA solicits comment on proper management practices for using dithiocarbamates (DTC) at MP&M facilities. EPA also requests information on alternative chemicals (e.g., hydrazine, sodium borohydride) or technologies for use in chelation breaking as reducing or precipitation agents and the associated costs and environmental impacts.

8. Possible Deletion of Regulated Parameters. The list of parameters which EPA proposes to regulate in

today's proposal are listed in the proposed codified rule that accompanies this preamble. EPA is soliciting comments and data on parameters that should be deleted from consideration for regulation.

9. Additional Technology Data. The Agency solicits additional data on the use of ultrafiltration systems for the removal of oily wastes and organic pollutants and on microfiltration systems for the removal of metal pollutants and Total Suspended Solids (TSS) in relation to process wastewater in the MP&M category. The Agency is particularly interested in receiving data on: (1) Technology performance, including pollutant reduction/elimination; (2) economics, including initial capital investment, operation and maintenance costs, payback period, waste disposal savings, material input savings, and other savings; (3) overall energy use; (4) sludge generation, including metals recoverability and the ability of sludge to be recycled on or off-site; (5) waste oil generation, including oil recovery and the ability of the oil to be recycled on or off-site; (6) air quality impacts and emissions. In addition, as some technologies eliminate or reduce discharges to water, but not to other media, the Agency solicits comments on the environmental impacts and regulatory costs associated with each technology's impact on other environmental media. The Agency particularly welcomes comments on technology performance and cost from MP&M facilities currently using these systems and from technology vendors and developers.

10. Costs of Contract Hauling MP&M Wastewater and Sludge. EPA's cost model costs facilities to contract haul small volumes of process wastewater when the cost is estimated to be less than installing and operating a wastewater treatment system. EPA used data from the detailed surveys (see Section V for a discussion of the Detailed Surveys) to estimate costs associated with contract hauling MP&M process wastewater and wastewater treatment sludge. EPA solicits comment on the total cost of contract hauling small volumes of untreated MP&M process wastewater and how much those costs differ based on the type of wastewater (i.e., oily wastewater, hexavalent chromium-bearing wastewater, concentrated metal-bearing wastewater, chelated wastewater). EPA also solicits comment on the cost to haul hazardous wastewater treatment sludge.

11. Ultrasonic Cleaning. EPA solicits comment on non-chemical cleaning methods, such as ultrasonic cleaning.

Prior to performing surface finishing operations, facilities must clean the metal surface to remove dirt, grit, grease or other surface contaminants that may interfere with the finish. Currently, the most common method for cleaning metal parts prior to surface finishing operations is using an alkaline cleaning bath, which may be followed by electrolytic cleaning and rinsing steps, and then an acid bath followed by another rinse step. Recently, some facilities have started to use ultrasonic cleaning (*i.e.*, the use of sound waves) to clean metal surfaces prior to electroplating (or other surface finishing operations). Ultrasonic cleaning generates a wastewater that does not contain acid or alkaline cleaning agents. EPA solicits data and information on ultrasonic cleaning including the capital and operation and maintenance costs, feasibility of this method versus more traditional methods, characterization of the wastewater generated, size of the ultrasonic cleaning unit, and the limitations on its use (*e.g.*, is it only available for parts of a certain size or shape?).

12. Mixed-Use Facility Definition and Determination. As discussed in Section III, EPA is proposing to cover MP&M process wastewater at mixed-use facilities (*i.e.*, any municipal, private, U.S. military or federal facility which contains both industrial and commercial/administrative buildings at which one or more industrial sites conduct operations within the facility's boundaries). However, unlike the typical industrial facility, such as an aircraft or electronic equipment manufacturing plant with one primary manufacturing activity, the majority of military installations are mixed-use facilities and more like municipalities with several small industries as well as other operations within their boundaries. EPA is proposing to allow wastewater generated at different sites within a mixed-use facility to be dealt with as separate discharges for the purpose of applying the appropriate low flow cutoff (when applicable). EPA is proposing to allow the control authority to use its discretion in determining which wastewater discharges can be considered separate discharges for the purposes of applying the appropriate low flow cutoff (when applicable). The determination would likely be based on the degree of proximity between industrial operations and a practical application of the requirements for applicable MP&M subcategories.

EPA seeks information from facilities (both military and non-military) that believe they would fall within this mixed-use facility category. In addition,

EPA seeks comments on the choice to allow control authorities to make this determination and the factors for making such a decision as well as alternative ways to divide a mixed-use facility.

13. Subcategorization of Metal Finishing Job Shops. EPA is proposing to create a subcategory called "Metal Finishing Job Shops." This subcategory would only include facilities that are job shops by definition (*i.e.*, they own less than 50 percent of the parts that they process on-site) and are performing one of the six identifying operations in the existing Metal Finishing and Electroplating effluent guidelines. As discussed in Section VI.A, EPA chose to subcategorize these facilities as separate from facilities in the General Metals subcategory (which includes captive metal finishing and electroplating shops) based on the variability of their wastewater and on economics. Although, the facilities in both subcategories are performing many of the same operations and require the same wastewater treatment technologies. EPA requests comment on whether to combine the Metal Finishing Job Shops subcategory with the General Metals subcategory (or a portion of the General Metals subcategory). This would also include combining the data sets from which EPA sets the numerical limits for the rule.

In addition, the Agency notes that today's proposal sets a low flow exclusion for the indirect dischargers in the General Metals subcategory to reduce permitting burden, but does not set a low flow exclusion for the Metal Finishing Job Shops subcategory, as those facilities already have permits under existing effluent guidelines (see sections II.D, VI.C, and XII for discussions on the low flow exclusion). However, EPA notes that the proposed limits and standards for the Metal Finishing Job Shops subcategory are somewhat less stringent than those being proposed for the General Metals subcategory. EPA solicits comment on whether the use of the low flow exclusion for indirect dischargers in the General Metals subcategory versus no exclusion for facilities in the Metal Finishing Job Shops subcategory would cause a shift away from the use of job shops or whether the difference in numeric limitations would prevent such a shift.

14. Printed Wiring Board Job Shops. EPA solicits comment on the best placement, in terms of subcategorization, for printed wiring board "job shops." EPA has identified a small number of facilities that perform some steps in the printed wiring board

manufacturing process. For example, a printed wiring board manufacturer may contract out the tin/lead soldering operations to a printed wiring board job shop. Such a facility never performs all the steps necessary for manufacturing printed wiring boards. EPA is proposing to include these facilities in the Metal Finishing Job Shops subcategory due to their similarity in economics (due to the "job shop" nature of their work). However, EPA is soliciting comment on whether it is more appropriate to include these printed wiring board job shops in the Printed Wiring Board subcategory. More specifically, EPA requests data on the characterization of the wastewater from printed wiring board job shops, the variability of their raw materials, and the variability of the wastewater they generate.

15. BMPs in Lieu of Numerical Limitations. EPA solicits comment on allowing MP&M facilities to demonstrate compliance through installation of well-operated and maintained treatment systems. For example, instead of meeting a cyanide limit, the facility would demonstrate and keep records of the installation and ongoing use of a well-operated and maintained cyanide destruction unit that monitors oxidation-reduction potential (ORP). EPA is particularly interested in comments on how to define "well-operated and maintained" and estimates of the burden (in labor hours and dollars) required to keep records sufficient for demonstrating compliance and prepare a related certification statement.

EPA also solicits comment from control and permitting authorities on whether such an approach would increase or decrease their burden related to determining compliance and by how much (in labor hours and dollars). Comments should account for maintaining certifications and conducting inspections. EPA also requests comment on whether such an approach would be protective of the environment.

16. Applicability to Facilities With Ancillary MP&M Operations. EPA solicits comment on the language used to define applicability in regards to facilities that are not manufacturing, maintaining or rebuilding metal parts, products or machines for use in the 18 industrial sectors and that only perform MP&M operations (*e.g.*, maintenance and repair of metal parts and machines) as ancillary activities. For example, as discussed in Section III, EPA does not intend for the MP&M proposal to include process wastewater discharges from an on-site machine or maintenance shop at a facility engaged in the

manufacture of organic chemicals when the facility operates that shop to maintain the equipment related to manufacturing their products (*i.e.*, organic chemicals). EPA solicits comment on the clarity of this statement and specifically requests comment on alternative language. For example, EPA could use the following language instead: "facilities that perform on-site maintenance and repair of equipment used to produce a product or perform an operation (*e.g.*, manufacturing of organic chemicals) where the wastewater generated is already covered by effluent guidelines for another point source category (with the exception of the Metal Finishing or Electroplating effluent guidelines) are excluded from the applicability of the MP&M regulation."

17. Non-Chromium Anodizing. EPA is proposing to exclude wastewater from indirect discharging non-chromium anodizing facilities (that also do not use dichromate sealants) from the MP&M categorical pretreatment standards. Such facilities would still need to comply with the pretreatment standards of the Metal Finishing (40 CFR part 433) effluent guidelines for their non-chromium anodizing wastewater and the general pretreatment standards at 40 CFR part 403. EPA is proposing limits for direct dischargers in this subcategory. EPA solicits comment on whether the applicable standards for indirect discharging non-chromium anodizers should be transferred from 40 CFR part 433 to the MP&M regulation in order to include all non-chromium anodizers under one regulation. Because today's proposal includes a monitoring waiver for pollutants that are not present (see section XXI.C.1 for a discussion on the monitoring waiver), the Agency believes that transferring the pretreatment standards for these facilities to the MP&M regulation would allow non-chromium anodizing indirect dischargers to reduce the number of parameters for which they have to monitor.

In addition, EPA solicits comment and data on the chromium content of sulfuric acid anodizing baths, anodizing dyes/sealants, and other wastewater from sulfuric acid anodizing. EPA is especially interested in data that provides measurement of hexavalent chromium separate from that of trivalent chromium or total chromium.

18. Cyanide Monitoring. EPA is proposing to allow facilities, in subcategories with limits and standards for cyanide, to also monitor for amenable cyanide when they have alkaline chlorination treatment in place prior to commingling their wastewater

(see detailed discussion in section XXI.C.3). The point of compliance is based on monitoring for total cyanide (or amenable cyanide) directly after cyanide treatment, before combining the cyanide treated effluent with other wastestreams. EPA is also proposing an alternative where a facility may take samples of final effluent, in order to meet the total cyanide limit, if the control authority adjusts the permit limits based on the dilution ratio of the cyanide wastestream flow to the effluent flow. EPA is proposing to allow end-of-pipe alternative sampling point for amenable cyanide as well; however, in addition to adjusting the permit limits based on the dilution ratio, facilities must have alkaline chlorination treatment in place prior to the commingling of their cyanide-bearing wastewater with other process wastewater. The Agency notes this is very similar to the language used in the Metal Finishing effluent guidelines (40 CFR part 433). EPA solicits comment on this approach.

19. Compliance Cost for BAT Facilities. EPA has based the numeric limitations for today's proposed rule on wastewater sampling analytical data from facilities that the Agency believes to be operating "best available technology." This includes pollution prevention and water conservation practices as well as wastewater treatment systems. However, because EPA uses more than one facility to determine the achievable long-term average concentrations and variability factors (see Section VIII.B for a discussion on calculation of limits), not all model facilities are achieving the long-term average concentrations for all pollutants in their wastewater at all times. Therefore, EPA has included compliance costs to enhance these model BAT facilities to meet the proposed long-term average concentrations for all regulated pollutants. For example, model BAT facilities may incur costs for additional operational controls or for additional equipment or chemical additives that will allow them to target more than one metal type in their wastewater treatment system. EPA solicits comment on this approach and the adequacy of operational changes and treatment enhancements for BAT facilities to consistently and reliably achieve full compliance with proposed limitations. EPA also solicits comment and data on additional costs that model BAT facilities may incur that EPA has not included in the cost model for this proposal.

20. Space Limitations. EPA solicits comment on the extent to which a

MP&M facility can install or upgrade its current treatment system to meet the proposed limits within the space they currently occupy. More specifically, when facilities are located in urban areas with little space for expansion, can facilities still install the treatment necessary (consider the inclusion of pollution prevention and water conservation practices) to meet the proposed limits. If not, can such facilities use pollution prevention and water conservation practices and install microfiltration systems instead of installing or enlarging their existing clarifiers within the space they currently occupy?

21. Segregation of Waste Streams. EPA solicits comment and information on the problems/ issues with segregation of waste streams for performing preliminary treatment steps as described in section VIII. EPA is especially interested in data on the costs associated with retrofitting equipment to segregate waste streams.

22. Revision to POTW Removals. EPA uses the pollutant by pollutant percent removals achieved by POTWs (national average of well-operated POTWs with secondary treatment) to give credit to the pretreatment system and to conduct the "Pass Through" analysis for selecting regulated parameters for pretreatment standards.

In calculating the pollutant removals achieved by the selected technology option for today's proposed rule (for wastewater generated by indirect dischargers), EPA does not take "credit" for removing the portion of pollutant loadings that are currently removed by the POTWs. In addition, EPA performs a comparison of the percentage of a pollutant removed by POTWs with the percentage of the pollutant removed by discharging facilities applying EPA's selected technology option (BAT). In most cases, (particularly for metals and non-volatile organics) EPA has concluded that a pollutant passes through the POTW when the median percentage removed nationwide by representative POTWs (those meeting secondary treatment requirements) is less than the median percentage removed by facilities complying with BAT effluent limitations guidelines for that pollutant. EPA notes that the Pass Through Analysis uses a different standard for "pass through" than that used by POTWs to determine compliance with the General Pretreatment Standards (40 CFR part 403).

Recently, EPA has revisited the databases used (see Section XII.A for a discussion of the databases and the editing criteria used) to determine the

percent removal of pollutants achieved by the national average of well-operated POTWs. Previously, EPA edited data at or near the minimum level for POTW performance based on the editing criteria used to calculate BAT limitations. EPA is considering revising the POTW data editing criteria. Given the range of analytical minimum levels and their influence on calculated percent removals, EPA is considering several editing alternatives, detailed in section XIV. The Agency solicits comments on potential revisions to the pass-through methodology.

23. Toxic Weighting Factors. EPA has developed Toxic Weighting Factors (TWFs) using a combination of toxicity data on human health and aquatic life. EPA develops TWFs relative to the toxicity of copper. (See section XVII or the Cost-Effectiveness Analysis Document for this proposed rule for a more detailed discussion of toxic weighting factors). TWFs are multipliers that are applied to the mass of pollutants discharged (or removed) to generate toxic-weighted pound-equivalents. EPA uses toxic pound-equivalents to indicate the amount of toxicity that a pollutant may exert on human health and aquatic life relative to other pollutants. Conventional pollutants such as BOD, TSS, Oil & Grease (as HEM) and other bulk parameters do not have toxic weighting factors. As scientists and researchers develop and publish new human health and aquatic toxicity data for various pollutants, EPA must revise the TWFs. EPA has documented the changes to TWFs in the Cost-Effectiveness Analysis document for this proposed rule. EPA solicits comment on these changes.

24. Phosphoric Acid Cleaning. In regards to the applicability of the Oily Wastes subcategory, EPA is soliciting comment on the differences in metals content of wastewater generated from "light" phosphoric acid operations (such as some phosphoric acid etching operations and cleaning operations using phosphoric acid solutions) and from phosphate conversion coating. EPA is considering including phosphoric acid etching and cleaning using phosphoric acid solutions in the definition of "oily operations" discussed in section VI.C.6. However, the Agency is not considering the inclusion of phosphate conversion coating as one of the "oily operations." Based on EPA's database for this proposal, EPA believes that wastewater generated from phosphate conversion coating operations contains high levels of zinc and manganese. EPA is especially interested in analytical data from sampling wastewater that is

representative of either of these operations.

25. Organics Management Plan for Oily Wastes Subcategory. EPA solicits comment on whether sites with significant amounts of oil-bearing wastewater (for example, a facility in the Oily Wastes subcategory) should be eligible for the use of an organic pollutant management plan as described Section XXI.C.2. Based on the current data base, EPA believes that wastewater generated by facilities in the Oily Wastes subcategory require end-of-pipe treatment to reduce the concentrations of organic pollutants and that an organic management plan alone may not adequately control organic-bearing wastewater at facilities containing significant quantities of oil-bearing wastewater.

26. NSPS and PSNS Technology Option. EPA is proposing NSPS and PSNS for the General Metals, Metal Finishing Job Shops, Printed Wiring Board, and Steel Forming and Finishing subcategories based on BAT Option 4. This proposed option includes in-process flow control and pollution prevention, segregation of wastewater streams, preliminary treatment steps as necessary (including oils removal by ultrafiltration), chemical precipitation using lime or sodium hydroxide, and solids separation using a microfilter. The Agency also strongly considered proposing NSPS and PSNS for these subcategories based on ultrafiltration for oil and grease removal and chemical precipitation followed by sedimentation for TSS and metals removal. This option is equivalent to BAT Option 2 with the oil/water separator replaced by an ultrafilter. The Agency is soliciting comment and data on this option for NSPS and PSNS for the final rule.

27. Total Sulfide. EPA is soliciting comment on the appropriate analytical method for analyzing total sulfide in wastewater from MP&M facilities, specifically in regard to interferences from reducing agents or organic chemicals present in the wastewater. The Agency used EPA Method 376.1 for seven wastewater sampling episodes, EPA Method 376.2 at one episode, and Standard Method 4500-S2 for three sampling episodes that were performed for EPA by a local POTW. Stakeholders have suggested that presence of reducing agents and organic chemicals can interfere with EPA Method 376.1, leading to over estimates of total sulfide.

EPA performed matrix spike/matrix spike duplicate recoveries as part of its QA/QC procedures on these samples. If the matrix spike is recovered quantitatively (e.g., 75–125%), it is unlikely that an interference is present.

The data narratives for these samples did not cite any QA/QC outliers. However, some interferences could still be present. (The data narratives can be found in section 5.2 of the public record.) EPA intends to perform additional sampling for total sulfide following this proposal using both EPA Method 376.1 and 376.2. EPA notes that it collected the data used for estimating total sulfide pollutant loadings in raw wastewater (i.e., in wastewater from MP&M unit operations) at sampling points located prior to treatment technologies which introduce reducing agents (i.e., chelation breaking). In addition, the data that EPA used to develop the numerical limitation for total sulfide was from a site that did not add reducing agents to treat its wastewater.

EPA solicits comment on the various sulfide methods and whether these methods are appropriate for analytical wastewater sampling at MP&M facilities. EPA also solicits raw wastewater and treatment performance data for total sulfide.

28. Limits for the Non-Chromium Anodizing Subcategory. EPA is soliciting comment on two issues relating to the proposed limitations for the Non-Chromium Anodizing subcategory. These two issues are discussed below.

EPA is proposing an effluent limitation for aluminum applicable to existing and new direct dischargers in the Non-Chromium Anodizing subcategory. Because EPA does not have data from any direct discharging non-chromium anodizers, it based the proposed aluminum limitation on two indirect discharging non-chromium anodizers. However, the Agency does not believe that these indirect discharging facilities were achieving effluent levels of aluminum that reflect BAT. Because aluminum assists in the flocculation of wastewater at POTWs prior to sedimentation, many POTWs do not set stringent pretreatment standards for aluminum from non-chromium anodizers. EPA is not proposing pretreatment standards for aluminum in today's proposal for that reason. In addition, neither the Electroplating (40 CFR part 413) nor the Metal Finishing (40 CFR part 433) effluent guidelines contain pretreatment standards for aluminum. Therefore, the Agency does not believe that these two facilities targeted aluminum in their wastewater treatment operations. EPA believes that a non-chromium anodizer employing Option 2 technologies can achieve effluent concentrations of aluminum much lower than those proposed today. Therefore, EPA is soliciting data and

comment on effective removal of aluminum from non-chromium anodizing wastestreams. See section XXIV for guidelines for submitting analytical data.

EPA is proposing effluent limitations for new and existing direct dischargers for manganese, nickel and zinc for facilities in the Non-Chromium Anodizing subcategory. The Agency based these effluent limitations on facilities in the General Metals subcategory employing the Option 2 treatment technology because it did not have adequate wastewater treatment information on these metals from non-chromium anodizing facilities. EPA solicits data and comment on the treatment of manganese, nickel, and zinc from non-chromium anodizing facilities employing Option 2 treatment. See section XXIV for guidelines for submitting analytical data.

29. Limits for the Printed Wiring Subcategory. EPA is proposing effluent limitations for chromium, copper, lead, and zinc for existing facilities in the Printed Wiring Boards subcategory. The Agency based these effluent limitations on facilities in the General Metals subcategory employing the Option 2 treatment technology because it did not have adequate wastewater treatment information on these metals from printed wiring board facilities employing Option 2 treatment. EPA solicits data and comment on the treatment of chromium, copper, lead, and zinc at printed wiring board facilities employing Option 2 treatment. See section XXIV for guidelines for submitting analytical data.

30. Cyanide Loadings and Removals. EPA solicits comment and data (at the point directly following cyanide destruction treatment) on achievable effluent concentrations of cyanide (or amenable cyanide) from MP&M facilities that are currently regulated under the Metal Finishing effluent guidelines (40 CFR part 433). EPA's Design & Cost Model for the MP&M rule estimates pollutant loadings for the industry before and after compliance with the proposed regulation. For the purposes of estimating baseline loadings (*i.e.*, current discharges) for model facilities (*i.e.*, survey sites) currently covered by the Metal Finishing or Electroplating effluent guidelines that indicated in their survey questionnaire that they both generate wastewater from cyanide-bearing operations and have cyanide treatment in place, EPA assumed that these sites were achieving the LTA concentrations achieved by EPA's sampled MP&M BAT facilities (sampled at the point directly following cyanide destruction treatment).

For model sites currently covered by the Metal Finishing or Electroplating effluent guidelines that indicated in their survey questionnaire that they generate wastewater from cyanide-bearing operations but *did not* indicate that they have cyanide treatment in place, EPA used information from EPA sampling of cyanide bearing units operations (*i.e.*, raw wastewater loads) to estimate baseline loads prior to implementing the technology option under consideration (note that cyanide loadings were not analyzed separately by subcategory). On a national basis, EPA estimates that 65% (2,315) of MP&M facilities discharging cyanide-bearing wastewater do not have treatment in place for cyanide destruction. EPA based this national estimate on responses to survey questionnaires. This methodology implicitly assumes that many of these facilities may not be achieving the cyanide removals that were projected for the Metal Finishing and Electroplating effluent guidelines. In addition to the request for data above, EPA also requests comment on its method for determining baseline cyanide loadings. (See Section 6.5 of the public record for a memorandum that includes a table of the comparison of cyanide using sites versus cyanide treating sites.)

31. Subcategorization. EPA explains its rationale for its proposed subcategorization scheme in section VI. EPA is proposing to subdivide the MP&M industrial category into the following 8 subcategories: General Metals, Metal Finishing Job Shops, Non-Chromium Anodizing, Printed Wiring Boards, Steel Forming and Finishing, Oily Wastes, Railroad Line Maintenance, and Shipbuilding Dry Dock. The Agency believes its proposed subcategories make sense, but requests comment on other possible subcategories. Commenters should include data to support their suggestions where possible.

32. Cost Savings Associated with Pollution Prevention and Water Conservation. As discussed in section VIII, EPA's proposed technology options include the incorporation of water conservation techniques and pollution prevention technologies. In all cases, EPA's options that incorporated these technologies and practices costed less and removed more pollutants than those options that did not. EPA requests comment on its determination that pollution prevention, recycle, and water conservation result in net cost savings to facilities, and examples of any specific situations where this may not be true.

33. Assessment of Treatment System Performance. As discussed in section VIII, EPA excluded data from chemical precipitation and clarification systems at which the concentration of most of the metals present in the influent stream did not decrease, indicating poor treatment. Although EPA believes this is an appropriate practice, in order to focus on facilities with well-run treatment systems, it also introduces a risk of biasing estimates of treatment effectiveness upwards with respect to identifying pollutant removals on a national basis. If a particular metal is not able to be effectively removed by a particular treatment train, but its concentration fluctuates randomly over time in both the influent and the effluent, then retaining only data showing positive "removals" may give a misleading impression of effectiveness of that treatment technology nationally. Some commenters have raised this issue in the past particularly with respect to boron, which those commenters believe is not effectively removed by certain treatment trains where EPA's data (edited to include only decreases) appears to show removals. EPA is continuing to assess this concern both with regards to metals in general and with regards to boron in particular. EPA requests comment on this issue and suggestions for addressing it.

34. Flow Cutoff Level for the General Metals Subcategory. As explained in sections XII and XIII, EPA is proposing a 1 MGY flow cutoff for existing and new indirect discharging facilities in the General Metals subcategory. EPA requests comment on the 1 MGY flow cutoff and whether a higher or lower cutoff would be appropriate. EPA also requests comment on whether the flow cutoff should be different for facilities currently covered under 40 CFR Part 413 or 433 and whether or not that would create an unfair economic advantage for those facilities (*e.g.*, captive electroplating shops in General Metals remaining regulated under 40 CFR Part 433 but Metal Finishing Job Shops being regulated under the proposed MP&M rule).

35. Flow Cutoff Level for the Metal Finishing Job Shops Subcategory. As explained in sections XII and XIII, EPA is not proposing a flow cutoff for existing or new indirect discharging facilities in the Metal Finishing Job Shops subcategory. The Agency concluded that the pollutant reductions associated with the proposed option (Option 2) were feasible and achievable and the economic impacts were not substantially mitigated under the 1 MGY flow cutoff. EPA requests

comment on the use of a flow cutoff for this subcategory.

36. Flow Cutoff Level for the Printed Wiring Board Subcategory. As explained in sections XII and XIII, EPA is not proposing a flow cutoff for existing or new indirect discharging facilities in the Printed Wiring Board subcategory. The Agency concluded that the pollutant reductions associated with the proposed option (Option 2) were feasible and achievable and the economic impacts were not mitigated at a 1 MGY flow cutoff for this subcategory. The Agency solicits comments on a 1 MGY flow cutoff. Under this scenario, existing regulation would continue to apply. EPA solicits comment on the implementation and market consequences of this option.

37. Flow Cutoff Level for the Steel Forming and Finishing Subcategory. As explained in sections XII and XIII, EPA is not proposing a flow cutoff for existing or new indirect discharging facilities in the Steel Forming and Finishing subcategory. However, EPA solicits comment on flow cutoffs at the 1, 2, and 3 MGY levels. Under these flow cutoff scenarios, existing regulations would continue to apply. EPA solicits comment on implementation and market consequences of these options.

38. Flow Cutoff Level for the Oily Wastes Subcategory. As explained in sections XII and XIII, EPA is proposing a 2 MGY flow cutoff for existing and new indirect discharging facilities in the Oily Wastes subcategory. It is proposing the 2 MGY flow cutoff primarily to reduce the burden on POTWs, and solicits comment on a 3 MGY cutoff.

39. For the General Metals, Metal Finishing Job Shops, Printed Wiring Boards, and Steel Forming and Finishing subcategories, EPA is proposing new source performance standards and pretreatment standards for new sources based on Option 4. EPA noted in section IX in the discussion of its consideration of this technology for BPT/BAT for each of these subcategories that it is not being proposed for BPT because the additional removals, while large when considered across the entire population of existing facilities, were not significant on a per facility basis, and because of concerns with potential increased loadings (relative to Option 2) of COD and organic pollutants. EPA requests comment on basing NSPS on Option 2 for the above subcategories for the same reasons it is proposing to base BPT/BAT on Option 2.

40. Monitoring Costs. In estimating annual monitoring costs for model facilities in EPA's MP&M Design and Cost Model, the Agency assumed that

facilities meeting local limitations or national effluent limitation guidelines and pretreatment standards will already incur monitoring costs. EPA solicits comment on whether the facilities will incur additional monitoring costs to comply with today's proposal (and how much that monitoring would cost). EPA has incorporated several options for adding additional flexibility in regards to monitoring (See Section XXI.C for a discussion on monitoring flexibility). EPA expects that these proposed flexibilities will decrease the overall burden and costs of analytical wastewater monitoring for facilities within the scope of this rule.

41. Cash Flow Assumption. As discussed in Section XVI, baseline cash flow is defined as the sum of reported net income and depreciation. The measure is widely used within industry in evaluating capital investment decisions because both net income and depreciation (which is an accounting offset against income, but not an actual cash expenditure) are potentially available to finance future investment. However, assuming that total baseline cash flow is available over an extended time horizon (for example, 15 years) to finance investments related to environmental compliance could overstate a site's ability to comply. In particular, the cost of existing capital equipment (not associated with regulatory compliance) is not netted out of cash flow, as it is of income through the subtraction of depreciation. Thus, any costs associated with either replacing existing capital equipment, or repaying money that was previously borrowed to pay for it, are omitted from the facility analysis. EPA requests comment on its use of cash flow as a measure of resources available to finance environmental compliance and suggestions for alternative methodologies. (See Section XXII of today's notice.)

42. Alternatives for Establishing Permit Effluent Limitations and Standards for the Steel Forming and Finishing subcategory. As discussed in Section XXI.B, EPA is soliciting comment on several alternative approaches for the development of mass-based limitations for the Steel Forming and Finishing subcategory. These approaches may result in more stringent mass-based permits/control mechanisms for some facilities with better protection of the environment for the entire life of a permit/control mechanism and may result in higher costs. Each alternative requires that production from unit operations that do not generate or discharge process wastewater shall not be included in the

calculation of operating rates. EPA solicits comments on these alternatives to the proposed production basis for calculating effluent limitations and pretreatment standards used in NPDES permits or control mechanisms. In particular, the Agency solicits comments on related costs and any technical difficulties that steel forming and finishing facilities might have in meeting limits during short periods of high production. EPA also solicits other options for consideration including whether to allow concentration-based limits for this subcategory and any rationale for doing so.

43. Benefit Analysis. As explained in Section XX, benefits analyses for past effluent guidelines have been limited in the range of benefits addressed which has hindered EPA's ability to compare the benefits and costs of rules comprehensively. The Agency is working to improve its benefits analyses, including applying methodologies that have now become well established in the natural resources valuation field, but have not been used previously in the effluent guidelines program. EPA was particularly interested in expanding its benefits analysis for this rule to include water-based recreational activities other than fishing. EPA has therefore expanded upon its traditional methodologies in the benefits analysis for the proposed MP&M rule. Past effluent guidelines analyses have included human health benefits, economic productivity benefits such as reduced costs for POTW sludge disposal, recreational benefits for fishing, and nonuse values. The additional analysis contained in this rule expands on the traditional analysis by adding benefits to participants in boating, swimming, and viewing (i.e., near-water recreation). Because EPA has not yet resolved some anomalies in the extrapolation of the analysis to the national level, the monetized benefits for these new categories are not included in the summary statements of benefits for the proposed rule. However, EPA is including these analyses in the EEBA to present the new methodologies and their results as applied to the MP&M rule for public comment.

Although EPA is confident in the sample-based results, EPA believes that the large number of viewers and boaters projected to benefit from the rule at the national level may indicate a need to revise its procedures for scaling up from sampled facilities to the national level. This simple extrapolation technique used in both the cost and benefit analyses may bias both estimates and may have the unintended effect of overcounting the number of benefitting

boaters and wildlife viewers. EPA recognizes that extrapolating from sample facility to national results introduces uncertainty in the analysis and is continuing to explore ways to reduce this uncertainty. The Agency is requesting comment on the methods used to extrapolate sample results to national benefit estimates. EPA is also specifically soliciting comment on several of the other methodological approaches used in the new analysis including the benefits transfer of values from studies that did not specifically address boating and wildlife viewing to these activities, and the extent to which activities such as recreational boating and wildlife viewing are applicable to children. EPA may include additional categories of monetized benefits estimates based on these new methodologies, as revised based on comment and peer review, in its economic analysis for the final rule.

XXIV. Guidelines for Submission of Analytical Data

EPA requests that commenters to today's proposed rule submit analytical, flow, and production data to supplement data collected by the Agency during the regulatory development process. To ensure that commenter data may be effectively evaluated by the Agency, EPA has developed the following guidelines for submission of data.

A. Types of Data Requested

1. EPA requests paired influent and effluent treatment data for each of the technologies identified in the technology options (especially in cases where paired data will be helpful in assessing variability), as well as any additional technologies applicable to the treatment of MP&M wastewater. This includes end-of-pipe treatment technologies and in-process treatment, recycling, water reuse, or metal recovery technologies. Submission of effluent data only is not sufficient for full analysis; the corresponding influent data must be provided.

For submissions of paired influent and effluent treatment data, a minimum of four days of data are required for EPA to assess variability. Submissions of paired influent and effluent treatment data should include: a process diagram of the treatment system; treatment chemical addition rates; sampling point locations; sample collection dates; influent and effluent flow rates for each treatment unit during the sampling period; sludge or waste oil generation rates; a brief discussion of the treatment technology sampled; and a list of unit operations contributing to the sampled

wastestream. EPA requests data for systems that are treating only process wastewater. Systems treating non-process wastewater (e.g., sanitary wastewater or non-contact cooling water) will not be evaluated by EPA. In addition to data for the analytes discussed below, data for total suspended solids (TSS) and pH must be included with submissions of treatment data. If available, information on capital cost, annual (operation and maintenance) cost, and treatment capacity should be included for each treatment unit within the system.

2. EPA also requests flow, production, and analytical data from MP&M unit operations, rinses, and wet air pollution control devices. Submissions of analytical data for MP&M unit operations and rinses should include a process diagram of the unit operation; a description of the purpose and performance of the operation; production data associated with the sampling period; flow rates associated with the sampling period (i.e., continuous discharge flow rates, intermittent discharge rates and frequencies, or volume of bath and time of last discharge for stagnant baths); sample type (grab or composite); temperature and pH of each sample; sample collection dates; known process bath constituents; sampling point locations; and, the volume, discharge frequency, and destination of all process wastewater, waste oil, or sludge generated by the unit operation.

Associated production data should be provided in the following units: mass of metal removed (for abrasive jet machining, electrical discharge machining, grinding, machining, and plasma arc machining operations), in standard cubic feet of air flow (for wet air pollution control operations), or surface area of parts processed (for all other unit operations). Flow, production, and analytical data should all correspond to the same period of time. When applicable, a description of any pollution prevention technologies used at the site for the unit operations, including cost savings and pollution reduction estimates should be provided.

B. Analytes Requested

EPA considered metal, organic, conventional, and other nonconventional pollutant parameters for regulation under the MP&M Category. Based on analytical data collected, the Agency initially identified 132 pollutant parameters as MP&M "pollutants of concern." Complete lists of pollutant parameters considered for regulation and pollutants of concern (as well as the criteria used to identify each

of these pollutant parameters) are briefly discussed in Section VII and fully discussed the Technical Development Document for this proposal. The Agency requests analytical data for any of the 132 pollutants of concern and for any other pollutant parameters which commentors believe are of concern in the MP&M industry. TSS and pH data are requested for all samples. Table XXIV-1 presents the EPA analytical methods for these pollutants. Commentors should use these methods or equivalent methods for analyses, and should document the method used for all data submissions.

C. Quality Assurance/Quality Control (QA/QC) Requirements

EPA based today's proposed regulations on analytical data collected by EPA using rigorous QA/QC checks. These QA/QC checks include procedures specified in each of the analytical methods, as well as procedures used for the MP&M sampling program in accordance with EPA sampling and analysis protocols. The Agency requests that submissions of analytical data include documentation of QA/QC procedures.

EPA followed the QA/QC procedures specified in the analytical methods listed in Table XXIV-1. These QA/QC procedures include sample preservation and the use of method blanks, matrix spikes, matrix spike duplicates, laboratory duplicate samples, and Q standard checks (e.g., continuing calibration blanks). EPA requests that sites provide detection limits for all non-detected pollutants. EPA also requests that composite samples be collected for all flowing wastewater streams (except for analyses requiring grab samples, such as oil and grease), sites collect and analyze 10 percent field duplicate samples to assess sampling variability, and sites provide data for equipment blanks for volatile organic pollutants when automatic compositors are used to collect samples.

TABLE XXIV-1.—EPA ANALYTICAL METHODS FOR USE WITH MP&M

Parameter	EPA method
Acidity	305.1
Alkalinity	310.1
Ammonia as Nitrogen	350.1
BOD 5-Day (Carbonaceous)	405.1
Chemical Oxygen Demand (COD)	410.1
Chloride	410.2
Chloride	325.3
Cyanide, Total	335.2
Cyanide, Amenable	335.1
Fluoride	340.2
Metals	1620

TABLE XXIV-1.—EPA ANALYTICAL METHODS FOR USE WITH MP&M—Continued

Parameter	EPA method
Volatile Organics	1624
Semivolatile Organics	1625
Nitrogen, Total Kjeldahl	351.2
Oil and Grease	413.2
Oil and Grease (as HEM)	1664
pH	150.1
Phenolics, Total Recoverable	420.2
Phosphorus, Total	365.4
Sulfate	375.4
Sulfide, Total	376.2
Total Dissolved Solids (TDS)	160.1
Total Organic Carbon (TOC)	415.1
Total Petroleum Hydrocarbons (as SGT-HEM)	1664
Total Suspended Solids (TSS)	160.2
Weak-Acid Dissociable Cyanide ..	1677
Ziram	630.1

Appendix A to the Preamble—Abbreviations, Acronyms, and Other Terms Used in This Document

Act—The Clean Water Act
 Agency—U.S. Environmental Protection Agency
 AWQC—Ambient Water Quality Criteria
 BAT—Best available technology economically achievable, as defined by section 304(b)(2)(B) of the Act.
 BCT—Best conventional pollutant control technology, as defined by section 304(b)(4) of the Act.
 BMP—Best management practices, as defined by section 304(e) of the Act.
 BPT—Best practicable control technology currently available, as defined by section 304(b)(1) of the Act.
 CAA—Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended)
 CBI—Confidential Business Information
 Clean Water Act—(33 U.S.C 1251 *et seq.*, as amended)
 Conventional Pollutants—Constituents of wastewater as determined by section 304(a)(4) of the Act and the regulations thereunder 40 CFR 401.16, including pollutants classified as biochemical oxygen demand, suspended solids, oil and grease, fecal coliform, and pH.
 CE—Cost Effectiveness
 DAF—Dissolved Air Flotation
 Direct Discharger—An industrial discharger that introduces wastewater to a water of the United States with or without treatment by the discharger.
 EEA—Economic and Environmental Impact Assessment of the Proposed Effluent Limitations Guidelines and Standards for the Metal Products & Machinery Industry. This document presents the methodology employed to assess economic and environmental impacts of the proposed rule and the results of the analysis.
 Effluent Limitation—A maximum amount, per unit of time, production, volume or other unit, of each specific constituent of the effluent from an existing point source that is subject to limitation. Effluent limitations may be expressed as a mass

loading or as a concentration in milligrams of pollutant per liter discharged.
 End-of-Pipe Treatment—Refers to those processes that treat a plant waste stream for pollutant removal prior to discharge.
 FTE—Full Time Equivalents (related to the number of employees)
 HAP—Hazardous Air Pollutant
 HEM—Hexane Extractable Material refers to an analytical method (EPA Method 1664) for determining the level of oil and grease that does not use Freon extraction.
 Indirect Discharger—An industrial discharger that introduces wastewater into a publicly owned treatment works.
 MP&M—Metal Products and Machinery point source category
 NCEPI—EPA's National Center for Environmental Publications
 NESHAP—National Emission Standards for Hazardous Air Pollutants
 NRMRL—EPA's National Risk Management Research Laboratory (formerly RREL—EPA's Risk Reduction Engineering Laboratory).
 MACT—Maximum Achievable Control Technology (applicable to NESHAPs)
 Nonconventional Pollutants—Pollutants that have not been designated as either conventional pollutants or priority pollutants.
 NPDES—National Pollutant Discharge Elimination system, a Federal Program requiring industry dischargers, including municipalities, to obtain permits to discharge pollutants to the nation's water, under section 402 of the Act.
 OCPSF—Organic chemicals, plastics, and synthetic fibers manufacturing point source category (40 CFR part 414).
 ORP—Oxidation-Reduction Potential
 POTW—Publicly owned treatment works.
 Priority Pollutants—The 126 pollutants listed in 40 CFR part 423, appendix A.
 PPA—Pollutant Prevention Act of 1990 (42 U.S.C. 13101 *et seq.*, Pub. L. 101-508, November 5, 1990)
 PSES—Pretreatment Standards for existing sources of indirect discharges, under section 307(b) of the Act.
 PSNS—Pretreatment standards for new sources of indirect discharges, under sections 307 (b) and (c) of the Act.
 SIC—Standards Industrial Classification, a numerical categorization scheme used by the U.S. Department of Commerce to denote segments of industry.
 SGP—EPA's National Metal Finishing Strategic Goals Program.
 SGT-HEM—Silica Gel Treated—Hexane Extractable Material refers to the freon-free oil and grease method (EPA Method 1664) used to measure the portion of oil and grease that is similar to total petroleum hydrocarbons.
 SIU—Significant Industrial User as defined in the General Pretreatment Regulations (40 CFR part 403)
 Technical Development Document (TDD)—Development Document for Effluent Limitations Guidelines and Standards for the Metal Products and Machinery Point Source Category.
 TOC—Total Organic Carbon (EPA method 415.1)
 TOP—Total Organics Parameter

TRI—Toxic Release Inventory
 TTO—Total Toxic Organics as defined in the Metal Finishing effluent guidelines (40 CFR part 433).
 TWF—Toxic Weighting Factor
 VOC—Volatile Organic Compound

List of Subjects

40 CFR Part 413

Environmental protection, Electroplating, Metals, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control.

40 CFR Part 433

Environmental protection, Metals, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control.

40 CFR Part 438

Environmental protection, Metals, Waste treatment and disposal, Water pollution control.

40 CFR Part 463

Environmental protection, Plastics materials and synthetics, Waste treatment and disposal, Water pollution control.

40 CFR Part 464

Environmental protection, Metals, Waste treatment and disposal, Water pollution control.

40 CFR Part 467

Environmental protection, Aluminum, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control.

40 CFR Part 471

Environmental protection, Metals, Waste treatment and disposal, Water pollution control.

Dated: October 31, 2000.

Carol M. Browner,
 Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 413—ELECTROPLATING POINT SOURCE CATEGORY

1. The authority citation for Part 413 is revised to read as follows:

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342, and 1361.

2. Section 413.01 is amended by revising the first and last sentence of paragraph (a) to read as follows:

§ 413.01 Applicability and compliance dates.

(a) As defined more specifically in each subpart, this part applies to discharges resulting from electroplating operations in which a metal is electroplated on any basis material and to related metal finishing operations as set forth in the various subparts, whether such operations are conducted in conjunction with electroplating, independently, or as part of some other operation. * * * This part does not apply to any facility that must achieve the standards or limitations in 40 CFR 433.15 (Metal Finishing PSES) or 40 CFR part 438 (Metal Products & Machinery).

* * * * *

PART 433—METAL FINISHING POINT SOURCE CATEGORY

3. The authority citation for Part 433 is revised to read as follows:

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342, and 1361.

4. Section 433.10 is amended by revising paragraph (b) to read as follows:

§ 433.10 Applicability; description of the metal finishing point source category.

* * * * *

(b) In some cases, effluent limitations and standards for other industrial categories may be applicable to wastewater discharges from the metal finishing operations listed in paragraph (a) of this section. In such cases, the effluent limitations and standards for this part do not apply and the metal finishing operations are subject to the provisions of one of the following categories:

Iron and Steel (40 CFR part 420);
Nonferrous Metals Smelting and Refining (40 CFR part 421);
Metal Products and Machinery (40 CFR part 438);
Battery Manufacturing (40 CFR part 461);
Plastic Molding and Forming (40 CFR part 463);
Metal Casting Foundries (40 CFR part 464);
Coil Coating (40 CFR part 465);
Porcelain Enameling (40 CFR part 466);
Aluminum Forming (40 CFR part 467);
Copper Forming (40 CFR part 468);
Electrical and Electronic Components (40 CFR part 469); and
Nonferrous Metals Forming (40 CFR part 471).

* * * * *

5. A new part 438 is proposed to be added to read as follows:

PART 438—METAL PRODUCTS AND MACHINERY POINT SOURCE CATEGORY

Sec.

- 438.1 General applicability.
- 438.2 General definitions.
- 438.3 General pretreatment standards.
- 438.4 Monitoring requirements.
- 438.5 Compliance date for pretreatment standards for existing sources.

Subpart A—General Metals

- 438.10 Applicability.
- 438.12 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.13 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.14 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.15 Pretreatment standards for existing sources (PSES).
- 438.16 New source performance standards (NSPS).
- 438.17 Pretreatment standards for new sources (PSNS).

Subpart B—Metal Finishing Job Shops

- 438.20 Applicability.
- 438.21 Special definitions.
- 438.22 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.23 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.24 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.25 Pretreatment standards for existing sources (PSES).
- 438.26 New source performance standards (NSPS).
- 438.27 Pretreatment standards for new sources (PSNS).

Subpart C—Non-Chromium Anodizing

- 438.30 Applicability.
- 438.31 Special definitions.
- 438.32 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.33 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.34 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.36 New source performance standards (NSPS).

Subpart D—Printed Wiring Boards

- 438.40 Applicability.
- 438.42 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.43 Effluent limitations attainable by application of the best control

technology for conventional pollutants (BCT).

- 438.44 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.45 Pretreatment standards for existing sources (PSES).
- 438.46 New source performance standards (NSPS).
- 438.47 Pretreatment standards for new sources (PSNS).

Subpart E—Steel Forming and Finishing

- 438.50 Applicability.
- 438.51 Special definitions.
- 438.52 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.53 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.54 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.55 Pretreatment standards for existing sources (PSES).
- 438.56 New source performance standards (NSPS).
- 438.57 Pretreatment standards for new sources (PSNS).
- 438.58 Calculation of NPDES and pretreatment permit effluent limitations.

Subpart F—Oily Wastes

- 438.60 Applicability.
- 438.61 Special definitions.
- 438.62 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.63 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.64 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 438.65 Pretreatment standards for existing sources (PSES).
- 438.66 New source performance standards (NSPS).
- 438.67 Pretreatment standards for new sources (PSNS).

Subpart G—Railroad Line Maintenance

- 438.70 Applicability.
- 438.72 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 438.73 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.76 New source performance standards (NSPS).

Subpart H—Shipbuilding Dry Docks

- 438.80 Applicability.
- 438.81 Special definitions.
- 438.82 Effluent limitations attainable by the application of the best practicable

- control technology currently available (BPT).
- 438.83 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).
- 438.86 New source performance standards (NSPS).

Appendix A to Part 438—Typical Products In Metal Products & Machinery Sectors

Appendix B to Part 438—TOP Pollutants List

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361.

§ 438.1 General applicability.

(a)(1) As defined more specifically in each subpart, except as provided in paragraphs (b), (c), (d), (e), (f), and (g) of this section, this part applies to process wastewater discharges from existing or new industrial sites (including facilities owned and operated by federal, state, or local governments) engaged in manufacturing, rebuilding, or maintenance of metal parts, products or machines for use in the Metal Product & Machinery (MP&M) industrial sectors listed in this section. A list of typical products found in each of the 18 industrial sectors is provided in Appendix A to this part. The MP&M Industrial Sectors consist of the following:

Aerospace;
Aircraft;
Bus and Truck;
Electronic Equipment;
Hardware;
Household Equipment;
Instruments;
Job Shops;
Mobile Industrial Equipment;
Motor Vehicle;
Office Machine;
Ordnance;
Precious Metals and Jewelry;
Printed Wiring Boards;
Railroad;
Ships and Boats;
Stationary Industrial Equipment; or
Miscellaneous Metal Products.

(2) This part also applies to mixed-use facilities, as described in paragraph (h) of this section.

(b) The regulations in this part do not apply to wastewater discharges which are subject to the limitations and standards of one or more of the following categories:

- (1) Iron and steel manufacturing (40 CFR part 420).
- (2) Nonferrous metals manufacturing (40 CFR part 421).
- (3) Ferroalloy manufacturing (40 CFR part 424).
- (4) Battery manufacturing (40 CFR part 461).
- (5) Plastic molding and forming (40 CFR part 463).
- (6) Metal molding and casting (40 CFR part 464).

- (7) Coil coating (40 CFR part 465).
- (8) Porcelain enameling (40 CFR part 466).
- (9) Aluminum forming (40 CFR part 467).
- (10) Copper forming (40 CFR part 468).
- (11) Electrical and electronic components (40 CFR part 469).
- (12) Nonferrous metals forming and metal powders (40 CFR part 271).

(c) When a facility discharges process wastewater that is subject to the general applicability of this part and the facility discharges other wastewater that is subject to the limitations and standards of one or more of the categories listed in paragraph (b) of this section, the facility must comply with both the provisions of this part and other parts, as applicable.

(d) Facilities other than those reasonably included in the 18 MP&M industrial sectors specified in paragraph (a) of this section are not subject to this part when discharges from the maintenance or repair of metal parts or machines at the facility are performed only as ancillary activities.

(e) Wastewater discharges generated from electroplating during semiconductor wafer manufacturing in a "clean room" environment are not subject to this part. Wastewater discharges from electroplating during semiconductor final wafer assembly are subject to this part.

(f) Wastewater discharges resulting from the washing of cars, aircraft or other vehicles, when performed as a preparatory step prior to one or more successive manufacturing, rebuilding, or maintenance operations, are subject to this part.

(g) Process wastewater generated by maintenance and repair activities at gasoline service stations, passenger car rental facilities, or utility trailer and recreational vehicle rental facilities are not subject to this part.

(h) When this part is applied to wastewater discharges generated at different industrial sites (industrial buildings as well as outdoor locations where manufacturing, rebuilding, or maintenance occur as specified in § 438.1) within a mixed-use facility (as defined in § 438.2(c)), the control authority may consider these discharges to be separate for the purpose of applying the applicable low flow exemption to a pretreatment standard. The control authority must determine which wastewater discharges can be considered separate for this purpose.

§ 438.2 General definitions.

As used in this part:

(a) The general definitions and abbreviations in 40 CFR part 401 shall apply.

(b) The regulated parameters are listed with approved methods of analysis in

Table 1B at 40 CFR 136.3, and are defined as follows:

- (1) *BOD₅* means 5-day biochemical oxygen demand.
- (2) *Cadmium* means total cadmium.
- (3) *Chromium* means total chromium.
- (4) *Copper* means total copper.
- (5) *Cyanide (T)* means total cyanide.
- (6) *Cyanide (A)* means those cyanides which are amenable to alkaline chlorination.
- (7) *Lead* means total lead.
- (8) *Manganese* means total manganese.
- (9) *Molybdenum* means total molybdenum.
- (10) *Nickel* means total nickel.
- (11) *O&G (as HEM)* means total recoverable oil and grease as hexane extractable material.
- (12) *Silver* means total silver.
- (13) *Sulfide (as S)* means total sulfide.
- (14) *Tin* means total tin.
- (15) *TSS* means total suspended solids.
- (16) *Zinc* means total zinc.

(c) *Mixed-Use Facility* means any privately-owned or state, local, or federal government-owned facility which contains both industrial and commercial/administrative buildings (such as military bases and airports) at which one or more industrial sites conduct operations (including at least one that discharges wastewater subject to this part) within the facility's boundaries.

(d) *Non-process wastewater* means sanitary wastewater, non-contact cooling water, and storm water. In relation to a mixed-use facility, as defined in this part, non-process wastewater for this part also includes wastewater discharges from non-industrial sources such as residential housing, schools, churches, recreational parks, shopping centers as well as wastewater discharges from gas stations, utility plants, hospitals, and similar sources.

(e) *Process wastewater* means wastewater as defined in 40 CFR parts 122 and 401, and includes wastewater from non-contact, nondestructive testing (e.g., photographic wastewater from nondestructive X-ray examination of parts) performed at facilities subject to this part and includes wastewater from air pollution control devices.

(f) *TOP (total organics parameter)* means a parameter which is calculated as the sum of all quantifiable concentration values greater than the nominal quantitation value of the organic pollutants listed in the Appendix B to this part. These organic chemicals are defined as parameters at 40 CFR 136.3 in Table 1C, which also cites the approved methods of analysis

or have procedures that have been validated as attachments to EPA Methods 1624/624 or 1625/625.

(g) *TOC (as indicator)* means total organic carbon used as an indicator for the organic pollutants listed in the Appendix B to this part.

§ 438.3 General pretreatment standards.

Any source subject to this part that introduces process wastewater pollutants into a publicly owned treatment works (POTW) must comply with 40 CFR part 403.

§ 438.4 Monitoring requirements.

(a) *Monitoring options.* All subcategories with limitations or standards for the TOP or TOC (as indicator) parameters must choose one of three monitoring options:

(1) Achieve the limitation or standard specified for the TOP parameter;

(2) Achieve a limitation or standard specified for the TOC (as indicator) parameter; or

(3) Develop and certify the implementation of a management plan for organic chemicals.

(b) *Management plan for organic chemicals.* (1) The management plan for organic chemicals must specify to the satisfaction of the permitting authority (or the control authority for discharges to a POTW) all organic chemicals that are in use at the facility; the method(s) used for disposal of these chemicals; the procedures in place for ensuring that organic chemicals do not routinely spill or leak into the wastewater, or that reduce to a minimum the amount of organic chemicals that are used in the process; the procedures in place to manage the oxidation-reduction potential (ORP) of process wastewater during cyanide destruction to control the formation of chlorinated organic by-products; and the procedures employed to prevent an excessive dosage of dithiocarbamates when treating wastewater containing chelated metals. Facilities choosing to develop a management plan for organic chemicals must certify that the procedures described in the plan are being implemented at the facility. A mixed-use facility, as defined in § 438.2(c), may develop, certify, and implement one or more management plans for organic chemicals when multiple industrial sites are subject to this part within their facility boundaries.

(2) In lieu of monitoring for individual organic chemicals specified collectively as TOP in Appendix B of this part or in lieu of monitoring for TOC (as an indicator), the permitting authority (or the control authority for dischargers to a POTW) may allow

dischargers to make the following certification: "Based on my inquiry of the person or persons directly responsible for managing compliance with the provisions of the Metal Products and Machinery regulation, I certify that, to the best of my knowledge, this facility is implementing the management plan for organic chemicals which was submitted to the permitting (or control) authority." For dischargers to surface waters, this statement is to be included as a comment on the Discharge Monitoring Report (DMR) required by 40 CFR 122.44(i). For indirect dischargers, the statement is to be included as a comment to the periodic reports required by 40 CFR 403.12(e).

(c) *TOP monitoring.* In monitoring to measure compliance with the TOP standard, the industrial discharger need analyze only for those TOP organic chemicals which would reasonably be expected to be present. Facilities may apply for a monitoring waiver for any individual TOP organic chemical(s) as described in paragraph (e) of this section for indirect dischargers and 40 CFR 122.44 for direct dischargers. See § 438.2(f) for definition of TOP.

(d) *Cyanide monitoring.* Self-monitoring for cyanide must be conducted after cyanide treatment and before dilution with other wastewater streams. Alternatively, samples of the final effluent may be taken, if the plant limitations are adjusted based on the following dilution ratio: Cyanide-bearing wastewater flow divided by the final effluent flow.

(e) *Monitoring waivers for certain pollutants.* (1) The control authority may authorize a discharger subject to pretreatment standards in this part to forego sampling of a pollutant if the discharger has demonstrated through sampling and other technical factors, as described in paragraph (e)(2) of this section, that the pollutant is not used or generated on-site or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.

(2) Sampling or other technical information, including, but not limited to, information generated during the monitoring for the baseline monitoring report (40 CFR 403.12(b)) or the 90-day compliance report (40 CFR 403.12(d)), must be used to demonstrate that the pollutant is not used or generated on-site or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.

(3) Any grant of the monitoring waiver must be included in the control

mechanism as an express condition and the reasons supporting the grant must be documented in the fact sheet or similar supporting documentation.

§ 438.5 Compliance date for pretreatment standards for existing sources.

Any existing source subject to pretreatment standards in this part must be in compliance no later than [DATE 3 years after date of PUBLICATION of FINAL RULE].

Subpart A—General Metals

§ 438.10 Applicability.

(a) This subpart applies to process wastewater discharges from facilities (as specified in § 438.1(a)) other than those subject to subparts B, C, D, E, F, G, or H of this part.

(b) Facilities introducing process wastewater into a POTW at a rate that does not exceed 1 million gallons per year are not subject to § 438.15 or § 438.17.

§ 438.12 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

EFFLUENT LIMITATIONS [BPT]

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	34	18
2. O&G (as HEM)	15	12
3. TOC (as indicator)	87	50
4. TOP	9.0	4.3
5. Cadmium	0.14	0.09
6. Chromium	0.25	0.14
7. Copper	0.55	0.28
8. Cyanide (T)	0.21	0.13
9. Cyanide (A)	0.14	0.07
10. Lead	0.04	0.03
11. Manganese	0.13	0.09
12. Molybdenum	0.79	0.49
13. Nickel	0.50	0.31
14. Silver	0.22	0.09
15. Sulfide (as S) ..	31	13
16. Tin	1.4	0.67
17. Zinc	0.38	0.22

¹mg/L (ppm).

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving

the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.13 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.12.

§ 438.14 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for TOC (as indicator), TOP, cadmium, chromium, copper, cyanide (T), cyanide (A), lead, manganese, molybdenum, nickel, silver, sulfide (as S), tin, and zinc are the same as the corresponding limitation specified in § 438.12.

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.15 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, and except at facilities where the process wastewater introduced into a POTW does not exceed 1 million gallons per year, any existing source subject to this subpart must achieve the following:

**PRETREATMENT STANDARDS
[PSES]**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	87	50
2. TOP	9.0	4.3
3. Cadmium	0.14	0.09
4. Chromium	0.25	0.14

**PRETREATMENT STANDARDS—
Continued
[PSES]**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
5. Copper	0.55	0.28
6. Cyanide (T)	0.21	0.13
7. Cyanide (A)	0.14	0.07
8. Lead	0.04	0.03
9. Manganese	0.13	0.09
10. Molybdenum ...	0.79	0.49
11. Nickel	0.50	0.31
12. Silver	0.22	0.09
13. Sulfide (as S) ..	31	13
14. Tin	1.4	0.67
15. Zinc	0.38	0.22

¹ mg/L (ppm).

(b) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(d) A POTW has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

§ 438.16 New source performance standards (NSPS).

New point sources subject to this subpart must achieve the following new source performance standards (NSPS), as applicable.

(a) Any new point source subject to the provisions of this section and currently subject to the provisions of 433.16 that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable standards specified in 40 CFR 433.16. Those standards shall not apply after the expiration of the applicable time period specified in 40 CFR 122.29(d)(1); thereafter, the source must achieve the applicable standards specified in § 438.12 and § 438.14.

(b) The following performance standards apply with respect to each new point source that commences discharge after [date that is 60 days after the publication date of the final rule]. Discharges must remain within the pH range of 6 to 9 and must not exceed the following:

**PERFORMANCE STANDARDS
[NSPS]**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	28	18
2. O&G (as HEM) ..	15	12
3. TOC (as indicator)	87	50
4. TOP	9.0	4.3
5. Cadmium	0.02	0.01
6. Chromium	0.17	0.07
7. Copper	0.44	0.16
8. Cyanide (T)	0.21	0.13
9. Cyanide (A)	0.14	0.07
10. Lead	0.04	0.03
11. Manganese	0.29	0.18
12. Molybdenum ...	0.79	0.49
13. Nickel	1.9	0.75
14. Silver	0.05	0.03
15. Sulfide (as S) ..	31	13
16. Tin	0.03	0.03
17. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.17 Pretreatment standards for new sources (PSNS).

New sources subject to this subpart must achieve the following pretreatment standards for new sources (PSNS), as applicable.

(a) Any new source subject to the provisions of this section and currently subject to the provisions of 40 CFR 433.17 that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the standards specified in 40 CFR 433.17 for ten years beginning on the date the source commenced discharge or during the period of depreciation or amortization of the facility, whichever comes first, after which the source must achieve the standards specified in § 438.15.

(b) Except as provided in 40 CFR 403.7, and except at facilities where the process wastewater introduced into a POTW does not exceed 1 million gallons per year, the following standards apply with respect to each new source that commences discharge after [date

that is 60 days after the publication date of the final rule]:

PRETREATMENT STANDARDS
(PSNS)

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	87	50
2. TOP	9.0	4.3
3. Cadmium	0.02	0.01
4. Chromium	0.17	0.07
5. Copper	0.44	0.16
6. Cyanide (T)	0.21	0.13
7. Cyanide (A)	0.14	0.07
8. Lead	0.04	0.03
9. Manganese	0.29	0.18
10. Molybdenum	0.79	0.49
11. Nickel	1.9	0.75
12. Silver	0.05	0.03
13. Sulfide (as S) ..	31	13
14. Tin 0.03 0.03 ..	0.03	0.03
15. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(e) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

Subpart B—Metal Finishing Job Shops

§ 438.20 Applicability.

(a) This subpart applies to process wastewater discharges from facilities, as specified in § 438.1(a), that operate as a metal finishing job shop (as defined in § 438.21) and perform one or more of the following six operations:

electroplating; electroless plating; anodizing; coating (chromating, phosphating, passivating, and coloring); chemical etching and milling; or the manufacture of printed circuit boards (printed wiring boards).

(b) Metal finishing job shops that only perform anodizing without the use of chromic acid or dichromate sealants are not subject to this subpart, but may be subject to subpart C of this part.

(c) Facilities that manufacture, rebuild, or maintain printed wiring boards and do not operate as a job shop

(as defined in § 438.21) are not subject to this subpart, but are subject to subpart D of this part.

§ 438.21 Special definitions.

As used in this subpart, *metal finishing job shop* means a facility that owns 50 percent or less (based on metal surface area processed per year) of the materials undergoing metal finishing within the boundaries of a facility.

§ 438.22 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

EFFLUENT LIMITATIONS
(BPT)

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	60	31
2. O&G (as HEM)	52	26
3. TOC (as indicator)	78	59
4. TOP	9.0	4.3
5. Cadmium	0.21	0.09
6. Chromium	1.3	0.55
7. Copper	1.3	0.57
8. Cyanide (T)	0.21	0.13
9. Cyanide (A)	0.14	0.07
10. Lead	0.12	0.09
11. Manganese	0.25	0.10
12. Molybdenum	0.79	0.49
13. Nickel	1.5	0.64
14. Silver	0.15	0.06
15. Sulfide (as S) ..	31	13
16. Tin	1.8	1.4
17. Zinc	0.35	0.17

¹ mg/L (ppm).

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.23 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation

representing the application of BCT: Limitations for TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.22.

§ 438.24 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for TOC (as indicator), TOP, cadmium, chromium, copper, cyanide (T), cyanide (A), lead, manganese, molybdenum, nickel, silver, sulfide (as S), tin and zinc are the same as the corresponding limitation specified in § 438.22.

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.25 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart must achieve the following:

PRETREATMENT STANDARDS
(PSES)

Regulated Parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	78	59
2. TOP	9.0	4.3
3. Cadmium	0.21	0.09
4. Chromium	1.3	0.55
5. Copper	1.3	0.57
6. Cyanide (T)	0.21	0.13
7. Cyanide (A)	0.14	0.07
8. Lead	0.12	0.09
9. Manganese	0.25	0.10
10. Molybdenum	0.79	0.49
11. Nickel	1.5	0.64
12. Silver	0.15	0.06
13. Sulfide (as S) ..	31	13
14. Tin	1.8	1.4
15. Zinc	0.35	0.17

¹ mg/L (ppm).

(b) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the control authority, facilities must choose to

monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(d) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

§ 438.26 New source performance standards (NSPS).

New point sources subject to this subpart must achieve the following new source performance standards (NSPS), as applicable.

(a) Any new point source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable standards specified in 40 CFR 433.16. Those standards shall not apply after the expiration of the applicable time period specified in 40 CFR 122.29(d)(1); thereafter, the source must achieve the applicable standards specified in § 438.22 and § 438.24.

(b) The following performance standards apply with respect to each new point source that commences discharge after [date that is 60 days after the publication date of the final rule]. Discharges must remain within the pH range of 6 to 9 and must not exceed the following:

PERFORMANCE STANDARDS [NSPS]

Regulated Parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	28	18
2. O&G (as HEM)	15	12
3. TOC (as indicator)	78	59
4. TOP	9.0	4.3
5. Cadmium	0.02	0.01
6. Chromium	0.17	0.07
7. Copper	0.44	0.16
8. Cyanide (T)	0.21	0.13
9. Cyanide (A)	0.14	0.07
10. Lead	0.04	0.03
11. Manganese	0.29	0.18
12. Molybdenum	0.79	0.49
13. Nickel	1.9	0.75
14. Silver	0.05	0.03
15. Sulfide (as S) ..	31	13
16. Tin	0.03	0.03
17. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the permitting authority and pursuant to

§ 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.27 Pretreatment standards for new sources (PSNS).

New sources subject to this subpart must achieve the following pretreatment standards for new sources (PSNS), as applicable.

(a) Any new source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the standards specified in 40 CFR 433.17 for ten years beginning on the date the source commenced discharge or during the period of depreciation or amortization of the facility, whichever comes first, after which the source must achieve the standards specified in § 438.25.

(b) Except as provided in 40 CFR 403.7, the following standards apply with respect to each new source that commences discharge after [date that is 60 days after the publication date of the final rule]:

PRETREATMENT STANDARDS [PSNS]

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	78	59
2. TOP	9.0	4.3
3. Cadmium	0.02	0.01
4. Chromium	0.17	0.07
5. Copper	0.44	0.16
6. Cyanide (T)	0.21	0.13
7. Cyanide (A)	0.14	0.07
8. Lead	0.04	0.03
9. Manganese	0.29	0.18
10. Molybdenum	0.79	0.49
11. Nickel	1.9	0.75
12. Silver	0.05	0.03
13. Sulfide (as S) ..	31	13
14. Tin	0.03	0.03
15. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(e) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

Subpart C—Non-Chromium Anodizing

§ 438.30 Applicability.

(a) Except for facilities that discharge to a POTW, this subpart applies to discharges of process wastewater resulting from non-chromium anodizing, as defined in § 438.31.

(b) Facilities which commingle wastewater from non-chromium anodizing with wastewater subject to subparts A, B, or D of this part are not subject to this subpart but are subject to subparts A, B, or D of this part, as applicable.

(c) Facilities that discharge to a POTW and perform anodizing without the use of chromic acid or dichromate sealants are subject to 40 CFR part 413 or 40 CFR part 433, as applicable.

§ 438.31 Special definitions.

As used in this subpart, *non-chromium anodizing* means anodizing without the use of chromic acid or dichromate sealants.

§ 438.32 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

EFFLUENT LIMITATIONS [BPT]

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	60	31
2. O&G (as HEM)	52	26
3. Aluminum	8.2	4.0
4. Manganese	0.13	0.09
5. Nickel	0.50	0.31
6. Zinc	0.38	0.22

¹ mg/L (ppm).

§ 438.33 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.32.

§ 438.34 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for aluminum, manganese, nickel and zinc are the same as the corresponding limitation specified in § 438.32.

§ 438.36 New source performance standards (NSPS).

New point sources subject to this subpart must achieve the following new source performance standards (NSPS), as applicable.

(a) Any new point source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable standards specified in 40 CFR 433.16. Those standards shall not apply after the expiration of the applicable time period specified in 40 CFR 122.29(d)(1); thereafter, the source must achieve the applicable standards specified in § 438.32 and § 438.34.

(b) The following performance standards apply with respect to each new point source that commences discharge after [date that is 60 days after the publication date of the final rule]. Discharges must remain within the pH range of 6 to 9 and must not exceed the following:

**PERFORMANCE STANDARDS
(NSPS)**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	52	22
2. O&G (as HEM)	15	12
3. Aluminum	8.2	4.0
4. Manganese	0.13	0.09
5. Nickel	0.50	0.31
6. Zinc	0.38	0.22

¹ mg/L (ppm).

Subpart D—Printed Wiring Boards

§ 438.40 Applicability.

(a) This subpart applies to discharges of process wastewater resulting from the manufacture, maintenance and repair of printed wiring boards (printed circuit boards).

(b) Printed wiring board operations conducted at a metal finishing job shop (as defined in § 438.21) are not subject to this subpart.

§ 438.42 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

**EFFLUENT LIMITATIONS
(BPT)**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	60	31
2. O&G (as HEM)	52	26
3. TOC (as indicator)	101	67
4. TOP	9.0	4.3
5. Chromium	0.25	0.14
6. Copper	0.55	0.28
7. Cyanide (T)	0.21	0.13
8. Cyanide (A)	0.14	0.07
9. Lead	0.04	0.03
10. Manganese	1.3	0.64
11. Nickel	0.30	0.14
12. Sulfide (as S) ..	31	13
13. Tin	0.31	0.14
14. Zinc	0.38	0.22

¹ mg/L (ppm).

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.43 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for TSS, O&G (as HEM) and

pH are the same as the corresponding limitation specified in § 438.42.

§ 438.44 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for TOC (as indicator), TOP, chromium, copper, cyanide (T), cyanide (A), lead, manganese, nickel, sulfide (as S), tin and zinc are the same as the corresponding limitation specified in § 438.42.

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.45 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart must achieve the following pretreatment standards:

**PRETREATMENT STANDARDS
(PSES)**

Regulated parameter	Maximum daily ¹	Maximum Monthly avg. ¹
1. TOC (as indicator)	101	67
2. TOP	9.0	4.3
3. Chromium	0.25	0.14
4. Copper	0.55	0.28
5. Cyanide (T)	0.21	0.13
6. Cyanide (A)	0.14	0.07
7. Lead	0.04	0.03
8. Manganese	1.3	0.64
9. Nickel	0.30	0.14
10. Sulfide (as S) ..	31	13
11. Tin	0.31	0.14
12. Zinc	0.38	0.22

¹ mg/L (ppm).

(b) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(d) The control authority has the option of imposing mass-based

standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

§ 438.46 New source performance standards (NSPS).

New point sources subject to this subpart must achieve the following new source performance standards (NSPS), as applicable.

(a) Any new point source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable standards specified in 40 CFR 433.16. Those standards shall not apply after the expiration of the applicable time period specified in 40 CFR 122.29(d)(1); thereafter, the source must achieve the applicable standards specified in § 438.42 and § 438.44.

(b) The following performance standards apply with respect to each new point source that commences discharge after [date that is 60 days after the publication date of the final rule]. Discharges must remain within the pH range of 6 to 9 and must not exceed the following:

PERFORMANCE STANDARDS (NSPS)

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	28	18
2. O&G (as HEM)	15	12
3. TOC (as indicator)	101	67
4. TOP	9.0	4.3
5. Chromium	0.17	0.07
6. Copper	0.01	0.01
7. Cyanide (T)	0.21	0.13
8. Cyanide (A)	0.14	0.07
9. Lead	0.04	0.03
10. Manganese	0.29	0.18
11. Nickel	1.9	0.75
12. Sulfide (as S) ..	31	13
13. Tin	0.09	0.07
14. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or

implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.47 Pretreatment standards for new sources (PSNS).

New sources subject to this subpart must achieve the following pretreatment standards for new sources (PSNS), as applicable.

(a) Any new source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the standards specified in 40 CFR 433.17 for ten years beginning on the date the source commenced discharge or during the period of depreciation or amortization of the facility, whichever comes first, after which the source must achieve the standards specified in § 438.45.

(b) Except as provided in 40 CFR 403.7, the following standards apply with respect to each new source that commences discharge after [date that is 60 days after the publication date of the final rule]:

PRETREATMENT STANDARDS (PSNS)

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	101	67
2. TOP	9.0	4.3
3. Chromium	0.17	0.07
4. Copper	0.01	0.01
5. Cyanide (T)	0.21	0.13
6. Cyanide (A)	0.14	0.07
7. Lead	0.04	0.03
8. Manganese	0.29	0.18
9. Nickel	1.9	0.75
10. Sulfide (as S) ..	31	13
11. Tin	0.09	0.07
12. Zinc	0.08	0.06

¹ mg/L (ppm).

(c) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(e) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based

standard times the average daily flow of process wastewater discharged by the source into the POTW.

Subpart E—Steel Forming and Finishing

§ 438.50 Applicability.

(a) This subpart applies to discharges of process wastewater from surface finishing or cold forming operations on steel wire, rod, bar, pipe or tubing. This subpart does not apply to process wastewater from these same operations when they are performed on base materials other than steel.

(b) Wastewater discharges from the following operations on steel are not subject to this subpart: any hot forming operation; and cold forming, continuous electroplating, or continuous hot dip coating of sheets, strips or plates. Wastewater discharges from performing these operations on steel are subject to 40 CFR part 420.

§ 438.51 Special definitions.

As used in this subpart:

(a) *Acid pickling* means the removal of scale and/or oxide from steel surfaces using acid solutions. The mass-based limitations for acid pickling operations include wastewater flow volumes from acid treatment with and without chromium, acid pickling neutralization, annealing, alkaline cleaning, electrolytic sodium sulfate descaling, and salt bath descaling.

(b) *Alkaline cleaning* means the application of solutions containing caustic soda, soda ash, alkaline silicates, or alkaline phosphates to a metal surface primarily for removing mineral deposits, animal fats, and oils. The mass-based limitations for alkaline cleaning operations include wastewater flow volumes from alkaline cleaning for oil removal, alkaline treatment without cyanide, aqueous degreasing, annealing, and electrolytic cleaning operations.

(c) *Cold forming* means operations conducted on unheated steel for purposes of imparting desired mechanical properties and surface qualities (density, smoothness) to the steel. The mass-based limitations for cold forming operations are based on zero wastewater discharge from welding operations.

(d) *Continuous Annealing* means a heat treatment process in which steel is exposed to an elevated temperature in a controlled atmosphere for an extended period of time and then cooled. The mass-based limitations for continuous annealing operations include wastewater flow volumes from heat treating operations.

(e) *Electroplating* means the application of metal coatings including,

but not limited to, chromium, copper, nickel, tin, zinc, and combinations thereof, on steel products using an electro-chemical process. The mass-based limitations for electroplating operations includes wastewater flow volumes from acid pickling, annealing, alkaline cleaning, electroplating without chromium or cyanide, and electroless plating operations.

(f) *Hot Dip Coating* means the coating of pre-cleaned steel parts by immersion in a molten metal bath. The mass-based limitations for hot dip coating operations includes wastewater flow volumes from acid pickling, annealing, alkaline cleaning, chemical conversion coating without chromium, chromate conversion coating, galvanizing, and hot dip coating operations.

(g) *Lubrication* means the process of applying a substance to the surface of

the steel in order to reduce friction or corrosion. The mass-based limitations for lubrication operations includes wastewater flow volumes from corrosion preventive coating operations as defined in § 438.61(b).

(h) *Mechanical Descaling* means the process of removing scale by mechanical or physical means from the surface of steel. The mass-based limitations for mechanical descaling operations includes wastewater flow volumes from abrasive blasting, burnishing, grinding, impact deformation, machining, and testing operations.

(i) *Painting* means applying an organic coating to a steel bar, rod, wire, pipe, or tube. The mass-based limitations for painting operations includes wastewater flow volumes from

spray or brush painting and immersion painting.

(j) *Pressure Deformation* means applying force (other than impact force) to permanently deform or shape a steel bar, rod, wire, pipe, or tube. The mass-based limitations for pressure deformation operations includes wastewater flow volumes from forging operations and extrusion operations.

§ 438.52 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

EFFLUENT LIMITATIONS [BPT]
TABLE 1

Pollutant	TSS		O&G (as HEM)	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.0709	0.0369	0.0312	0.0239
(b) Alkaline Cleaning	0.0709	0.0369	0.0312	0.0239
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00355	0.00184	0.00156	0.00120
(e) Electroplating	0.142	0.0737	0.0623	0.0478
(f) Hot Dip Coating	0.0206	0.0107	0.00903	0.00693
(g) Lubrication	0.00170	0.000884	0.000748	0.000574
(h) Mechanical Descaling	0.000284	0.000148	0.000125	0.0000956
(i) Painting	0.00922	0.00479	0.00405	0.00311
(j) Pressure Deformation	0.00355	0.00184	0.00156	0.00120

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 2

Pollutant	TOC		TOP	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.181	0.103	0.0188	0.00896
(b) Alkaline Cleaning	0.181	0.103	0.0188	0.00896
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00901	0.00514	0.000937	0.000448
(e) Electroplating	0.361	0.206	0.0375	0.0180
(f) Hot Dip Coating	0.0523	0.0300	0.00543	0.00260
(g) Lubrication	0.000433	0.00247	0.000450	0.000215
(h) Mechanical Descaling	0.000721	0.000411	0.0000750	0.0000359
(i) Painting	0.0235	0.0134	0.00244	0.00117
(j) Pressure Deformation	0.00901	0.00514	0.000937	0.000448

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 3

Pollutant	Cadmium		Chromium	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.000292	0.000188	0.000509	0.000277
(b) Alkaline Cleaning	0.000292	0.000188	0.000509	0.000277
(c) Cold Forming	0	0	0	0

TABLE 3—Continued

Pollutant	Cadmium		Chromium	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(d) Continuous Annealing	0.0000146	0.00000938	0.0000255	0.0000139
(e) Electroplating	0.000583	0.000376	0.00102	0.000553
(f) Hot Dip Coating	0.0000845	0.0000545	0.000148	0.0000801
(g) Lubrication	0.00000699	0.00000450	0.0000123	0.00000663
(h) Mechanical Descaling	0.00000116	0.00000075	0.00000204	0.00000110
(i) Painting	0.0000379	0.0000244	0.0000662	0.0000359
(j) Pressure Deformation	0.0000146	0.00000938	0.0000255	0.0000139

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 4

Pollutant	Copper		Lead	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.00114	0.000565	0.0000737	0.0000522
(b) Alkaline Cleaning	0.00114	0.000565	0.0000737	0.0000522
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.0000570	0.0000283	0.00000368	0.00000261
(e) Electroplating	0.00228	0.00113	0.000148	0.000105
(f) Hot Dip Coating	0.000331	0.000164	0.0000214	0.0000152
(g) Lubrication	0.0000274	0.0000136	0.00000177	0.00000125
(h) Mechanical Descaling	0.00000455	0.00000226	0.00000029	0.00000021
(i) Painting	0.000148	0.0000734	0.00000957	0.00000678
(j) Pressure Deformation	0.0000570	0.0000283	0.00000368	0.00000261

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 5

Pollutant	Manganese		Molybdenum	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.000269	0.000183	0.00164	0.00103
(b) Alkaline Cleaning	0.000269	0.000183	0.00164	0.00103
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.0000135	0.00000914	0.0000820	0.0000511
(e) Electroplating	0.000537	0.000366	0.00328	0.00205
(f) Hot Dip Coating	0.0000779	0.0000531	0.000476	0.000297
(g) Lubrication	0.00000644	0.00000439	0.0000394	0.0000246
(h) Mechanical Descaling	0.00000107	0.00000073	0.00000656	0.00000409
(i) Painting	0.0000350	0.0000238	0.000214	0.000133
(j) Pressure Deformation	0.0000135	0.00000914	0.0000820	0.0000511

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 6

Pollutant	Nickel		Silver	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.00104	0.000642	0.000456	0.000187
(b) Alkaline Cleaning	0.00104	0.000642	0.000456	0.000187
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.0000520	0.0000321	0.0000228	0.00000934
(e) Electroplating	0.00208	0.00129	0.000912	0.000374
(f) Hot Dip Coating	0.000302	0.000186	0.000133	0.0000542
(g) Lubrication	0.0000250	0.0000154	0.0000110	0.00000448
(h) Mechanical Descaling	0.00000415	0.00000257	0.00000182	0.00000075
(i) Painting	0.000135	0.0000834	0.0000593	0.0000243
(j) Pressure Deformation	0.0000520	0.0000321	0.0000228	0.00000934

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 7

Pollutant Forming/finishing operation	Sulfide (as S)		Tin	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
(a) Acid Pickling	0.0630	0.0267	0.00274	0.00139
(b) Alkaline Cleaning	0.0630	0.0267	0.00274	0.00139
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00315	0.00134	0.000137	0.0000694
(e) Electroplating	0.126	0.0534	0.00547	0.00278
(f) Hot Dip Coating	0.0183	0.00774	0.000793	0.000403
(g) Lubrication	0.00151	0.000641	0.0000656	0.0000333
(h) Mechanical Descaling	0.000252	0.000107	0.0000110	0.00000555
(i) Painting	0.00818	0.00347	0.000356	0.000181
(j) Pressure Deformation	0.00315	0.00134	0.000137	0.0000694

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 8

Pollutant Forming/finishing operation	Zinc	
	Maximum daily ¹	Maximum monthly avg. ¹
(a) Acid Pickling	0.000793	0.000456
(b) Alkaline Cleaning	0.000793	0.000456
(c) Cold Forming	0	0
(d) Continuous Annealing	0.0000397	0.0000228
(e) Electroplating	0.00159	0.000912
(f) Hot Dip Coating	0.000230	0.000133
(g) Lubrication	0.0000191	0.0000110
(h) Mechanical Descaling	0.00000317	0.00000182
(i) Painting	0.000103	0.0000593
(j) Pressure Deformation	0.0000397	0.0000228

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 9

Pollutant Forming/finishing operation	Cyanide (T)		Cyanide (A)	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
(e) Electroplating	0.000865	0.000513	0.000580	0.000282

¹ Pounds per 1000 lbs. (gm/kg) of product.

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a). (d) Permit limitations must be established in accordance with § 438.58.

§ 438.53 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT:

Limitations for TSS, O&G (as HEM), and pH are the same as the corresponding limitation specified in § 438.52.

§ 438.54 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for TOC (as indicator), TOP, cadmium, chromium, copper, cyanide (T), cyanide (A), lead, manganese, molybdenum, nickel, silver, sulfide (as S), tin, and zinc are the same as the corresponding limitation specified in § 438.52.

(b) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving

the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.55 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart must achieve the following pretreatment standards: Limitations for TOC (as indicator), TOP, cadmium, chromium, copper, cyanide (T), cyanide (A), lead, manganese, molybdenum, nickel, silver, sulfide (as S), tin, and zinc are the same as the corresponding limitation specified in § 438.52.

(b) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(c) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(d) Pretreatment standards must be established in accordance with § 438.58.

§ 438.56 New source performance standards (NSPS).

New point sources subject to this subpart must achieve the following new source performance standards (NSPS), as applicable.

(a) Any new point source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable new source standards

specified in 40 CFR part 420. Those standards shall not apply after the expiration of the applicable time period specified in 40 CFR 122.29(d)(1); thereafter, the source must achieve the applicable standards specified in §§ 438.52 and 438.54.

(b) The following performance standards apply with respect to each new point source that commences discharge after [date that is 60 days after the publication date of the final rule]. Discharges must remain within the pH range of 6 to 9 and must not exceed the following:

PERFORMANCE STANDARDS [NSPS]

TABLE 1

Pollutant	TSS		O&G (as HEM)	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.0571	0.0358	0.0312	0.0239
(b) Alkaline Cleaning	0.0571	0.0358	0.0312	0.0239
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00286	0.00179	0.00156	0.00120
(e) Electroplating	0.115	0.0716	0.0623	0.00478
(f) Hot Dip Coating	0.0166	0.0104	0.00903	0.00693
(g) Lubrication	0.00137	0.000859	0.000748	0.000574
(h) Mechanical Descaling	0.000229	0.000144	0.000125	0.0000956
(i) Painting	0.00743	0.00466	0.00405	0.00311
(j) Pressure Deformation	0.00286	0.00179	0.00156	0.00120

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 2

Pollutant	TOC		TOP	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.181	0.103	0.0188	0.00896
(b) Alkaline Cleaning	0.181	0.103	0.0188	0.00896
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00901	0.00514	0.000937	0.000448
(e) Electroplating	0.361	0.206	0.0375	0.0180
(f) Hot Dip Coating	0.0523	0.0298	0.00543	0.00260
(g) Lubrication	0.00433	0.00247	0.000450	0.000215
(h) Mechanical Descaling	0.000721	0.000411	0.0000750	0.0000359
(i) Painting	0.0235	0.0134	0.00244	0.00117
(j) Pressure Deformation	0.00901	0.00514	0.000937	0.000448

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 3

Pollutant	Cadmium		Chromium	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.0000267	0.0000184	0.000355	0.000143
(b) Alkaline Cleaning	0.0000267	0.0000184	0.000355	0.000143
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00000133	0.00000092	0.0000178	0.00000714
(e) Electroplating	0.0000534	0.0000368	0.000710	0.000286
(f) Hot Dip Coating	0.00000773	0.00000533	0.000103	0.0000415
(g) Lubrication	0.00000064	0.00000044	0.00000851	0.00000343
(h) Mechanical Descaling	0.00000011	0.00000007	0.00000142	0.00000057
(i) Painting	0.00000347	0.00000239	0.0000461	0.0000186
(j) Pressure Deformation	0.00000133	0.00000092	0.0000178	0.00000714

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 4

Pollutant	Copper		Lead	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.000898	0.000327	0.0000692	0.0000517
(b) Alkaline Cleaning	0.000898	0.000327	0.0000692	0.0000517
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.0000449	0.0000164	0.00000346	0.00000258
(e) Electroplating	0.00180	0.000654	0.000139	0.000104
(f) Hot Dip Coating	0.000261	0.0000949	0.0000201	0.0000150
(g) Lubrication	0.0000216	0.00000785	0.00000166	0.00000124
(h) Mechanical Descaling	0.00000359	0.00000131	0.00000028	0.00000021
(i) Painting	0.000117	0.0000425	0.00000899	0.00000671
(j) Pressure Deformation	0.0000449	0.0000164	0.00000346	0.00000258

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 5

Pollutant	Manganese		Molybdenum	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.000600	0.000364	0.00164	0.00103
(b) Alkaline Cleaning	0.000600	0.000364	0.00164	0.00103
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.0000300	0.0000182	0.0000820	0.0000511
(e) Electroplating	0.00120	0.000728	0.00328	0.00205
(f) Hot Dip Coating	0.000174	0.000106	0.000476	0.000297
(g) Lubrication	0.0000144	0.00000873	0.0000394	0.0000246
(h) Mechanical Descaling	0.00000240	0.00000146	0.00000656	0.00000409
(i) Painting	0.0000780	0.0000473	0.000214	0.000133
(j) Pressure Deformation	0.0000300	0.0000182	0.0000820	0.0000511

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 6

Pollutant	Nickel		Silver	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.00391	0.00156	0.0000955	0.0000582
(b) Alkaline Cleaning	0.00391	0.00156	0.0000955	0.0000582
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.000196	0.0000779	0.00000477	0.00000291
(e) Electroplating	0.00782	0.00312	0.000191	0.000117
(f) Hot Dip Coating	0.00114	0.000452	0.0000277	0.0000169
(g) Lubrication	0.0000939	0.0000374	0.00000229	0.00000140
(h) Mechanical Descaling	0.0000157	0.00000623	0.00000038	0.00000023
(i) Painting	0.000509	0.000203	0.0000125	0.00000756
(j) Pressure Deformation	0.000196	0.0000779	0.00000477	0.00000291

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 7

Pollutant	Sulfide (as S)		Tin	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Acid Pickling	0.0630	0.0267	0.0000606	0.0000453
(b) Alkaline Cleaning	0.0630	0.0267	0.0000606	0.0000453
(c) Cold Forming	0	0	0	0
(d) Continuous Annealing	0.00315	0.00134	0.00000303	0.00000226
(e) Electroplating	0.126	0.0534	0.000122	0.0000905
(f) Hot Dip Coating	0.0183	0.00774	0.0000176	0.0000132
(g) Lubrication	0.00151	0.000641	0.00000145	0.00000109
(h) Mechanical Descaling	0.000252	0.000107	0.00000024	0.00000018
(i) Painting	0.00818	0.00347	0.00000788	0.00000588

TABLE 7—Continued

Pollutant	Sulfide (as S)		Tin	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(j) Pressure Deformation	0.00315	0.00134	0.0000303	0.00000226

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 8

Pollutant	Zinc	
	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation		
(a) Acid Pickling	0.000163	0.000111
(b) Alkaline Cleaning	0.000163	0.000111
(c) Cold Forming	0	0
(d) Continuous Annealing	0.00000811	0.00000553
(e) Electroplating	0.000325	0.000222
(f) Hot Dip Coating	0.0000471	0.0000321
(g) Lubrication	0.00000389	0.00000265
(h) Mechanical Descaling	0.00000065	0.00000044
(i) Painting	0.0000211	0.0000144
(j) Pressure Deformation	0.00000811	0.00000553

¹ Pounds per 1000 lbs. (gm/kg) of product.

TABLE 9

Pollutant	Cyanide (T)		Cyanide (A)	
	Maximum daily ¹	Maximum monthly avg. ¹	Maximum daily ¹	Maximum monthly avg. ¹
Forming/finishing operation				
(a) Electroplating	0.000865	0.000513	0.000580	0.000282

¹ Pounds per 1000 lbs. (gm/kg) of product.

(c) Upon agreement with the permitting authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(e) Performance standards must be established in accordance with § 438.58.

§ 438.57 Pretreatment standards for new sources (PSNS).

New sources subject to this subpart must achieve the following pretreatment standards for new sources (PSNS), as applicable.

(a) Any new source subject to the provisions of this section that commenced discharging after [date 10 years prior to the date that is 60 days after the publication date of the final rule] and before [date that is 60 days after the publication date of the final rule] must continue to achieve the applicable new source standards specified in 40 CFR part 420 for ten

years beginning on the date the source commenced discharge or during the period of depreciation or amortization of the facility, whichever comes first, after which the source must achieve the standards specified in § 438.55.

(b) Except as provided in 40 CFR 403.7, the following standards apply with respect to each new source that commences discharge after [date that is 60 days after the publication date of the final rule]: Limitations for TOC (as indicator), TOP, cadmium, chromium, copper, cyanide (T), cyanide (A), lead, manganese, molybdenum, nickel, silver, sulfide (as S), tin, and zinc are the same as the corresponding limitation specified in § 438.56.

(c) Upon agreement with the control authority and pursuant to § 438.4(d), facilities with cyanide treatment have the option of achieving the limitation for either cyanide (T) or cyanide (A).

(d) Upon agreement with the control authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(e) Pretreatment standards must be established in accordance with § 438.58.

§ 438.58 Calculation of NPDES and pretreatment permit effluent limitations.

(a) Production-based limitations in NPDES permits must comply with 40 CFR 122.45(b)(2)(i). The average rate of production reported by the owner or operator in accordance with 40 CFR 403.12(b)(3) shall be based not upon the design production capacity but rather upon a reasonable measure of actual production of the facility, such as the production during the high month of the previous year, or the monthly average for the highest of the previous five years. For new sources or new dischargers, actual production shall be estimated using projected production.

(b) The following protocols shall be used when calculating the operating rate for Subpart E:

(1) For similar, multiple production lines with process waters treated in the same wastewater treatment system, the reasonable measure of production (the daily operating rate) shall be determined from the combined production of the similar production lines during the same time period.

(2) For process wastewater treatment systems where wastewater from two or more different production lines are

commingled in the same wastewater treatment system, the reasonable measure of production (the daily operating rate) shall be determined separately for each production line (or combination of similar production lines) during the same time period.

(c) Mass effluent limitations and pretreatment requirements for each forming/finishing operation shall be computed by multiplying the average daily operating rate (or other reasonable measure of production), as determined in accordance with § 438.58(b), by the respective effluent limitations guidelines or standards. The mass effluent limitations or pretreatment requirements applicable at a given NPDES or pretreatment compliance monitoring point shall be the sum of the mass effluent limitations or pretreatment requirements for each regulated pollutant parameter within each applicable forming/finishing operation with process wastewater discharging to that compliance monitoring point.

(d) Mass NPDES permit effluent limitations or pretreatment requirements derived from this part shall remain in effect for the term of the NPDES permit or pretreatment control mechanism, except:

(1) When the permit is modified in accordance with § 122.62 of this chapter or local POTW permit modification provisions; or

(2) Where the NPDES permit authorizes alternate effluent limitations for increased or decreased production levels in accordance with § 122.45(b)(2)(ii)(A)(1) of this chapter.

(e) Production from unit operations that do not generate or discharge process wastewater shall not be included in the calculation of the operating rate.

Subpart F—Oily Wastes

§ 438.60 Applicability.

(a) This subpart applies to process wastewater from facilities specified in § 438.1(a) that discharge wastewater exclusively from oily operations (as defined in § 438.61) and are not otherwise subject to subparts G or H of this part.

(b) Facilities introducing process wastewater into a POTW at a rate that does not exceed 2 million gallons per year are not subject to the pretreatment standards (§§ 438.65 and 438.67) of this subpart.

§ 438.61 Special definitions.

(a) As used in this subpart, *oily operations* means one or more of the following: Alkaline cleaning for oil

removal; aqueous or solvent degreasing; corrosion preventive coating (as specified in § 438.61(b)); floor cleaning; grinding; heat treating; deformation by impact or pressure; machining; painting; steam cleaning; laundering; and testing (such as, hydrostatic, dye penetrant, ultrasonic, magnetic flux).

(b) *Corrosion preventive coating* means the application of removable oily or organic solutions to protect metal surfaces against corrosive environments. Corrosion preventive coatings include, but are not limited to: petrolatum compounds, oils, hard dry-film compounds, solvent-cutback petroleum-based compounds, emulsions, water-displacing polar compounds, and fingerprint removers and neutralizers. Corrosion preventive coating does not include electroplating, or chemical conversion coating (including phosphate conversion coating) operations.

§ 438.62 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

EFFLUENT LIMITATIONS [BPT]

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	63	31
2. O&G (as HEM)	27	20
3. TOC (as indicator)	633	378
4. TOP	9.0	4.3
5. Sulfide (as S)	31	13

¹ mg/L (ppm).

(b) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.63 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.62.

§ 438.64 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BAT: Limitations for TOC (as indicator), TOP and sulfide (as S) are the same as the corresponding limitation specified in § 438.62.

(b) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.65 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, and except at facilities where the process wastewater introduced into a POTW does not exceed 2 million gallons per year, any existing source subject to this subpart must achieve the following pretreatment standards:

PRETREATMENT STANDARDS [PSES]

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TOC (as indicator)	633	378
2. TOP	9.0	4.3
3. Sulfide (as S)	31	13

¹ mg/L (ppm).

(b) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(c) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

§ 438.66 New source performance standards (NSPS).

(a) Any new point source subject to this subpart must achieve performance standards for TSS, O&G (as HEM), TOC (as indicator), TOP, sulfide (as S) and pH, which are the same as the corresponding limitation specified in § 438.62.

(b) Upon agreement with the permitting authority, facilities must

choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

§ 438.67 Pretreatment standards for new sources (PSNS).

(a) Except as provided in 40 CFR 403.7, or except at facilities where the process wastewater introduced into a POTW does not exceed 2 million gallons per year, any existing source subject to this subpart must achieve pretreatment standards for TOC (as indicator), TOP and sulfide (as S), which are the same as the corresponding standard specified in § 438.65.

(b) Upon agreement with the permitting authority, facilities must choose to monitor for TOP or TOC, or implement a management plan for organic chemicals as specified in § 438.4(a).

(c) The control authority has the option of imposing mass-based standards in place of the concentration-based standards. To convert to mass-based standards, multiply each parameter's concentration-based standard times the average daily flow of process wastewater discharged by the source into the POTW.

Subpart G—Railroad Line Maintenance

§ 438.70 Applicability.

(a) This subpart applies to discharges of process wastewater from facilities that perform routine cleaning and light maintenance on railroad engines, cars, car-wheel trucks, or similar parts or machines, and discharge wastewater exclusively from oily operations (as defined in § 438.61(a)) or from washing of the final product.

(b) Facilities engaged in the manufacture, overhaul or heavy maintenance of railroad engines, cars, car-wheel trucks, or similar parts or machines are not subject to this subpart. These facilities may be subject to Subpart A or F of this part.

§ 438.72 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within

the pH range 6 to 9 and must not exceed the following:

**EFFLUENT LIMITATIONS
[BPT]**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. BOD ₅	34	12
2. TSS	30	16
3. O&G (as HEM)	11	8

¹ mg/L (ppm).

§ 438.73 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for BOD₅, TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.72.

§ 438.76 New source performance standards (NSPS).

Any new point source subject to this subpart must achieve performance standards for BOD₅, TSS, O&G (as HEM) and pH, which are the same as the corresponding limitation specified in § 438.72.

Subpart H—Shipbuilding Dry Docks

§ 438.80 Applicability.

(a) This subpart applies to discharges of process wastewater generated in or on dry docks and similar structures, such as graving docks, building ways, marine railways and lift barges at shipbuilding facilities (or shipyards). This subpart applies to the following when generated by operations from within a dry dock or similar structure: process wastewater generated inside and outside the vessel (including bilge water) and wastewater generated from barnacle removal conducted as preparation for ship maintenance, rebuilding or repair.

(b) The following wastewater discharges are not subject to this subpart:

(1) Wastewater from “on-shore” operations (that is, other than dry docks and similar structures) at a shipyard.

(2) Wastewater generated on board ships and boats when they are afloat (that is, not in dry docks or similar structures). Wastewater generated on U.S. military ships and boats afloat in U.S. waters are subject to the Uniform

Discharge Standards (UNDS) at 40 CFR part 1700.

(3) Flooding water (as defined in § 438.81(a)), dry dock ballast water (as defined in § 438.81(b)), and storm water.

§ 438.81 Special definitions.

As used in this subpart:

(a) *Flooding water* means water that is used to float ships or boats into the dry dock or similar structure and is discharged prior to performing any MP&M operations, or water that is used to float ships or boats out of the dry dock or similar structure after all MP&M operations have ceased.

(b) *Dry dock ballast water* means water that enters and exits the dry dock or similar structure for the purpose of sinking or raising the dry dock.

§ 438.82 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BPT. Discharges must remain within the pH range 6 to 9 and must not exceed the following:

**EFFLUENT LIMITATIONS
[BPT]**

Regulated parameter	Maximum daily ¹	Maximum monthly avg. ¹
1. TSS	81	44
2. O&G (as HEM)	16	11

¹ mg/L (ppm).

§ 438.83 Effluent limitations attainable by application of the best control technology for conventional pollutants (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitation representing the application of BCT: Limitations for TSS, O&G (as HEM) and pH are the same as the corresponding limitation specified in § 438.82.

§ 438.86 New source performance standards (NSPS).

Any new point source subject to this subpart must achieve performance standards for TSS, O&G (as HEM) and pH, which are the same as the corresponding limitation specified in § 438.82.

APPENDIX A TO PART 483—TYPICAL PRODUCTS IN METAL PRODUCTS & MACHINERY SECTORS

<p>AEROSPACE</p> <p>Guided Missiles & Space Vehicle Guided Missile & Space Vehicle Prop. Other Space Vehicle & Missile Parts</p>	<p>AIRCRAFT</p> <p>Aircraft Engines & Engine Parts Aircraft Frames Manufacturing Aircraft Parts & Equipment Airports, Flying Fields, & Services</p>	<p>BUS & TRUCK</p> <p>Bus Terminal & Service Facilities Courier Services, Except by Air Freight Truck Terminals, W/ or W/O Maintenance Intercity & Rural Highways (Buslines) Local & Suburban Transit (Bus & subway) Local Passenger Trans. (Lim., Amb., Sight See) Local Trucking With Storage Local Trucking Without Storage Motor Vehicle Parts & Accessories School Buses Trucking Truck & Bus Bodies Truck Trailers</p>
<p>ELECTRONIC EQUIPMENT</p> <p>Communications Equipment Connectors for Electronic Applications Electric Lamps Electron Tubes Electronic Capacitors Electronic Coils & Transformers Electronic Components Radio & TV Communications Equipment Telephone & Telegraph Apparatus</p>	<p>HARDWARE</p> <p>Architectural & Ornamental Metal Work Bolts, Nuts, Screws, Rivets & Washers Crowns & Closures Cutlery Fabricated Metal Products Fabricated Pipe & Fabricated Pipe Fittings Fabricated Plate Work (Boiler Shops) Fabricated Structural Metal Fasteners, Buttons, Needles & Pins Fluid Power Valves & Hose Fittings Hand & Edge Tools Hand Saws & Saw Blades Hardware Heating Equipment, Except Electric Industrial Furnaces & Ovens Iron & Steel Forgings Machine Tool Accessories & Measuring Devices Machine Tools, Metal Cutting Types Machine Tools, Metal Forming Types Metal Shipping Barrels, Drums Kegs, Pails Metal Stampings Power Driven Hand Tools Prefabricated Metal Buildings & Components Screw Machine Products Sheet Metal Work Special Dies & Tools, Die Sets, Jigs, Etc Steel Springs Valves & Pipe Fittings Wire Springs</p>	<p>HOUSEHOLD EQUIPMENT</p> <p>Commercial, Ind. & Inst. Elec. Lighting Fixtures Current-Carrying Wiring Devices Electric Housewares & Fans Electric Lamps Farm Freezers Household Appliances Household Cooking Equipment Household Refrig. & Home & Farm Freezers Household Laundry Equipment</p> <p>Household Vacuum Cleaners Lighting Equipment Noncurrent-Carrying Wiring Devices Radio & Television Repair Shops Radio & Television Sets Except Commn. Types Refrig. & Air Cond. Serv. & Repair Shops Residential Electrical Lighting Fixtures</p>
<p>INSTRUMENTS</p> <p>Analytical Instruments Automatic Environmental Controls Coating, Engraving, & Allied Services Dental Equipment & Supplies Ophthalmic Goods Fluid Meters & Counting Devices Instruments to Measure Electricity Laboratory Apparatus & Furniture Manufacturing Industries Measuring & Controlling Devices Optical Instruments & Lenses Orthopedic, Prosthetic, & Surgical Supplies Pens, Mechanical Pencils, & Parts Process Control Instruments Search & Navigation Equipment Surgical & Medical Instruments & Apparatus Watches, Clocks, Associated Devices & Parts</p> <p>MOTOR VEHICLE</p> <p>Auto Exhaust System Repair Shops Automobile Dealers (new & used) Auto. Dealers (Dunebuggy, Go-Cart, Snowmobile) Automobile Service (includes Diag. & Insp. Cntrs.) Automotive Equipment Automotive Glass Replacement Shops Automotive Repairs Shops Automotive Stampings Automotive Transmission Repair Shops Carburetors, Pistons Rings, Valves Electrical Equipment for Motor General Automotive Repair Shops Mobile Homes Motor Vehicle & Automotive Bodies Motor Vehicle Parts & Accessories Motorcycle Dealers Motorcycles</p>	<p>JOB SHOP</p> <p>Perform Work on Products for Use In Any MP&M Sector But Owns Less Than 50% of the Products On-Site (e.g., Electroplating, Plating, Polishing, Anodizing, and Coloring)</p> <p>OFFICE MACHINE</p> <p>Calculating & Accounting Equipment Computer Maintenance & Repair Computer Peripheral Equipment Computer Related Services Computer Rental & Leasing Computer Storage Devices Computer Terminals Electrical & Electronic Repair Electronic Computers Office Machines Photographic Equipment & Supplies</p>	<p>MOBILE INDUSTRIAL EQUIPMENT</p> <p>Construction Machinery & Equipment Farm Machinery & Equipment Garden Tractors & Lawn & Garden Equipment Hoist, Industrial Cranes & Monorails Industrial Trucks, Tractors, Trailers, Tanks & Tank Components Mining Machinery & Equipment, Except Oil Field</p> <p>ORDNANCE</p> <p>Ammunition Ordnance & Accessories Small Arms Small Arms Ammunition</p>

APPENDIX A TO PART 483—TYPICAL PRODUCTS IN METAL PRODUCTS & MACHINERY SECTORS—Continued

Passenger Car Leasing Recreational & Utility Trailer Dealers Taxicabs Top & Body Repair & Paint Shops Travel Trailers & Campers Vehicles Vehicular Lighting Equipment Welding Shops (includes Automotive)		
PRECIOUS METALS & JEWELRY	PRINTED WIRING BOARD	RAILROAD
Costume Jewelry Jewelers' Materials & Lapidary Work Jewelry, Precious Metal Musical Instruments Silverware, Plated Ware, & Stainless	Printed Circuit Boards Printed Circuit Boards for Television and Radio Wiring Boards	Line-Haul Railroads Railcars, Railway Systems Switching & Terminal Stations
SHIPS AND BOATS	STATIONARY INDUSTRIAL EQUIPMENT	STEEL FORMING & FINISHING
Boat Building & Repairing Deep Sea Domestic Transportation of Freight Deep Sea Passenger Transportation, Except by Ferry Freight Transportation on the Great Lakes Marinas Ship Building & Repairing Towing & Tugboat Service Water Passenger Transportation Ferries Water Transportation of Freight Water Transportation Services	Air & Gas Compressors Automatic Vending Machines Ball & Roller Bearings Blowers & Exhaust & Ventilation Fans Commercial Laundry Equipment Conveyors & Conveying Equipment Electric Industrial Apparatus Elevators & Moving Stairways Equipment Rental & Leasing Food Product Machinery Fluid Power Cylinders & Actuators Fluid Power Pumps & Motors General Industrial Machinery Heavy Construction Equipment Rental Industrial Machinery Industrial Patterns Industrial Process Furnaces & Ovens Internal Combustion Engines Measuring & Dispensing Pumps Mechanical Power Transmission Equipment Metal Working Machinery Motors & Generators Oil Field Machinery & Equipment Packaging Machinery Paper Industries Machinery Printing Trades Machinery & Equipment Pumps & Pumping Equipment Refrigeration & Air & Heating Equipment Relays & Industrial Controls Rolling Mill Machinery & Equipment Scales & Balances, Except Laboratory Service Industry Machines Special Industry Machinery Sped Changers, High Speed Drivers & Gears Steam, Gas, Hydraulic Turbines, Generator Units Switchgear & Switchboard Apparatus Textile Machinery Transformers Welding Apparatus	Cold-Finished Steel Bars Steel Pipe and Tubes Steel Wiredrawing and Steel Nails and Spikes Miscellaneous Fabricated Wire Products (e.g., steel wire rope, cable, netting)
MISCELLANEOUS METAL PRODUCTS		
Miscellaneous Fabricated Wire Products Miscellaneous Metal Work Miscellaneous Repair Shops & Related Services Miscellaneous Transportation Equipment		

APPENDIX B TO PART 438—TOP POLLUTANTS LIST

Total organics parameter pollutants	CAS number	Nominal quantitation value (mg/L)
1. Acrolein	107-02-8	0.05
2. Benzoic acid	62-85-0	0.05
3. Carbon disulfide	75-15-0	0.01
4. Dibenzofuran	132-64-9	0.01
5. Dibenzothiophene	132-65-0	0.01
6. Isophorone	78-59-1	0.01
7. n-Hexadecane	544-76-3	0.01
8. n-Tetradecane	929-59-4	0.01
9. Aniline	62-53-3	0.01
10. Chloroform (trichloromethane)	67-66-3	0.01
11. Methylene chloride (dichloromethane)	75-09-2	0.01
12. Chloroethane (ethyl chloride)	75-00-3	0.05
13. 1,1-Dichloroethane	75-34-3	0.01

APPENDIX B TO PART 438—TOP POLLUTANTS LIST—Continued

Total organics parameter pollutants	CAS number	Nominal quantitation value (mg/L)
14. 1,1,1-Trichloroethane (methylchloroform)	71-55-6	0.01
15. Tetrachloroethene	127-18-4	0.01
16. 1,1-Dichloroethylene (vinylidene chloride)	75-35-4	0.01
17. Trichloroethylene	79-01-6	0.01
18. Biphenyl	92-52-4	0.01
19. p-Cymene	99-87-6	0.01
20. Ethylbenzene	100-41-4	0.01
21. Toluene	108-88-3	0.01
22. N-Nitrosodimethylamine	62-75-9	0.05
23. N-Nitrosodiphenylamine	86-30-6	0.02
24. Chlorobenzene	108-90-7	0.01
25. 2,6-Dinitrotoluene	606-20-2	0.01
26. Phenol	108-95-2	0.01
27. 4-Chloro-m-cresol (parachlorometacresol or 4-chloro-3-methylphenol)	59-50-7	0.01
28. 2,4-Dinitrophenol	51-28-5	0.05
29. 2,4-Dimethylphenol	105-67-9	0.01
30. 2-Nitrophenol (o-nitrophenol)	88-75-5	0.02
31. 4-Nitrophenol (p-nitrophenol)	100-02-7	0.05
32. Acenaphthene	83-32-9	0.01
33. Anthracene	120-12-7	0.01
34. 3,6-Dimethylphenanthrene	1576-67-6	0.01
35. Fluorene	86-73-7	0.01
36. Fluoranthene	206-44-0	0.01
37. 2-Isopropyl-naphthalene	2027-17-0	0.01
38. 1-Methylfluorene	1730-37-6	0.01
39. 2-Methylnaphthalene	91-57-6	0.01
40. 1-Methylphenanthrene	832-69-9	0.01
41. Naphthalene	91-20-3	0.01
42. Phenanthrene	85-01-8	0.01
43. Pyrene	129-00-0	0.01
44. Benzyl butyl phthalate	85-68-7	0.01
45. Dimethyl phthalate	131-11-3	0.01
46. Di-n-butyl phthalate	84-74-2	0.01
47. Di-n-octyl phthalate	117-84-0	0.01
48. Bis(2-ethylhexyl) phthalate	117-81-7	0.01

PART 463—PLASTICS MOLDING AND FORMING POINT SOURCE CATEGORY

6. The authority citation for part 463 is revised to read as follows:

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361.

7. Section 463.1 is amended by revising paragraph (c) to read as follows:

§ 463.1 Applicability.

* * * * *

(c) Processes that coat a plastic material onto a substrate may fall within the Electroplating, Metal Finishing, or Metal Products and Machinery provisions of 40 CFR parts 413, 433, and 438, as applicable. These coating processes are excluded from the effluent limitations guidelines and standards for the electroplating, metal finishing, and metal products and machinery point source categories and are subject to the plastics molding and forming regulation in this part.

* * * * *

PART 464—METAL MOLDING AND CASTING POINT SOURCE CATEGORY

8. The authority citation for part 464 is revised to read as follows:

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361.

9. Section 464.02 is amended by revising the last sentence of paragraphs (a), (b), (c), and (d) to read as follows:

§ 464.02 General definitions.

(a) * * * Processing operations following the cooling of castings not covered under aluminum forming, except for grinding scrubber operations which are covered here, are covered under the electroplating, metal finishing, and metal products and machinery point source categories (40 CFR parts 413, 433, and 438), as applicable.

(b) * * * Except for grinding scrubber operations which are covered here, processing operations following the cooling of castings are covered under the electroplating, metal finishing, and metal products and machinery point source categories (40 CFR parts 413, 433, and 438), as applicable.

(c) * * * Except for grinding scrubber operations which are covered here, processing operations following the cooling of castings are covered under the electroplating, metal finishing, and metal products and machinery point source categories (40 CFR parts 413, 433, and 438), as applicable.

(d) * * * Processing operations following the cooling of castings not covered under nonferrous metals forming are covered under the electroplating, metal finishing, and metal products and machinery point source categories (40 CFR parts 413, 433, and 438), as applicable.

* * * * *

PART 467—ALUMINUM FORMING POINT SOURCE CATEGORY

10. The authority citation for Part 467 is revised to read as follows:

Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361.

11. Section 467.01 is amended by revising the fourth sentence of paragraph (a) to read as follows:

§ 467.01 Applicability.

(a) * * * For the purposes of this part, surface treatment of aluminum is considered to be an integral part of aluminum forming whenever it is performed at the same plant site at which aluminum is formed and such operations are not considered for regulation under the Electroplating, Metal Finishing, or Metal Products and

Machinery provisions of 40 CFR parts 413, 433, and 438, as applicable. * * *

PART 471—NONFERROUS METAL FORMING AND METAL POWDERS POINT SOURCE CATEGORY

12. The authority citation for Part 471 is revised to read as follows:
Authority: 33 U.S.C. 1311, 1314, 1316, 1317, 1318, 1342 and 1361.

13. Section 471.01 is amended by revising paragraph (c) to read as follows:
§ 471.01 Applicability.
* * * * *
(c) Surface treatment includes any chemical or electrochemical treatment applied to the surface of the metal. For the purposes of this regulation, surface treatment of metals is considered to be an integral part of the forming of metals whenever it is performed at the same

plant site at which the metals are formed. Such surface treatment operations are not regulated under Electroplating, Metal Finishing, or Metal Products and Machinery Point Source Category regulations, 40 CFR parts 413, 433, and 438, respectively.
* * * * *
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Federal Register

**Wednesday,
January 3, 2001**

Part IV

Department of Education

**Native American Vocational and Technical
Education Program (NAVTEP); Notice
Inviting Applications for New Awards for
Fiscal Year (FY) 2000; Notice**

DEPARTMENT OF EDUCATION

[CFDA No: 84.101]

Native American Vocational and Technical Education Program (NAVTEP); Notice Inviting Applications for New Awards for Fiscal Year (FY) 2000

Notice to Applicants: This notice is a complete application package. Together with the statute authorizing the program and applicable regulations governing the program, including the Education Department General Administrative Regulations (EDGAR), the notice contains all of the information, application forms, and instructions needed to apply for a grant under this competition.

SUMMARY: The Secretary invites applications for new awards for FY 2000 under the Native American Program authority of section 116 of the Carl D. Perkins Vocational and Technical Education Act of 1998 (Act) and announces deadline dates for the transmittal of applications for funding under that program authority.

Purpose of Program: The Native American Vocational and Technical Education Program (NAVTEP), formerly known as the Indian Vocational Education Program (IVEP), provides grants to improve vocational and technical education programs that are consistent with the purposes of the Act and that benefit American Indians and Alaska Natives.

Eligible Applicants: (a) The following entities are eligible for an award under the NAVTEP:

- (1) A Federally recognized Indian tribe.
- (2) A tribal organization.
- (3) An Alaska Native entity.
- (4) A Bureau-funded school, except for a bureau funded school proposing to use its award to support secondary school vocational and technical education programs.

(b) Any tribe, tribal organization, Alaska Native entity, or eligible Bureau-funded school may apply individually or as part of a consortium with one or more eligible tribes, tribal organizations, Alaska Native entities, or eligible Bureau-funded schools. (Eligible applicants seeking to apply for funds as a consortium should read and follow the regulations in 34 CFR 75.127–75.129, which apply to group applications.)

Note: An applicant must include documentation in its application showing that it and, if appropriate, consortium members are eligible according to the requirements in paragraphs (a) and (b) of the “ELIGIBLE APPLICANTS” section of this notice.

Submission of Applications: Each tribe to be served must approve an application for a project to serve more than one Indian tribe. (25 U.S.C. 450b(1))

Deadline for Transmittal of Applications: March 2, 2001.

Available Funds: \$13,063,668 for the first 12 months of the 36-month project period. Funding for the second and third 12-month periods of the 36-month project period is subject to the availability of funds and to a grantee meeting the requirements of 34 CFR 75.253 (Continuation of multi-year project after the first budget period.).

Estimated Range of Awards: \$300,000 to \$500,000 for the first 12 months.

Estimated Average Size of Awards: \$375,000.

Estimated Number of Awards: 35.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

Applicable Statute and Regulations:

(a) The relevant provisions of the Carl D. Perkins Vocational and Technical Education Act of 1998, 20 U.S.C. 2301 *et seq.*, in particular, section 116(a)–(g).

(b) The Education Department General Administrative Regulations (EDGAR) as follows:

(1) 34 CFR part 74 (Administration of Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations).

(2) 34 CFR part 75 (Direct Grant Programs).

(3) 34 CFR part 77 (Definitions that Apply to Department Regulations).

(4) 34 CFR part 80 (Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments).

(5) 34 CFR part 81 (General Education Provisions Act—Enforcement).

(6) 34 CFR part 82 (New Restrictions on Lobbying).

(7) 34 CFR part 85 (Governmentwide Debarment and Suspension (Nonprocurement) and Governmentwide Requirements for Drug-Free Workplace (Grants)).

(8) 34 CFR part 86 (Drug and Alcohol Abuse Prevention).

(9) 34 CFR part 97 (Protection of Human Subjects).

(10) 34 CFR part 98 (Student Rights In Research, Experimental Programs and Testing).

(11) 34 CFR part 99 (Family Educational Rights and Privacy).

SUPPLEMENTARY INFORMATION:**General**

This notice implements section 116 of the Carl D. Perkins Vocational and Technical Education Act of 1998 (Act)

(Pub. L. 105–332), enacted October 31, 1998. In section 116(e) of the Act, Congress expresses its intent to fund programs that improve vocational and technical education. Section 116, which continues support for the Secretary to provide grants, cooperative agreements, and contracts for Native Americans to operate vocational and technical education projects, also gives the Secretary a strong mandate to expend Federal funds under the Native American Vocational and Technical Education Program on projects that improve vocational and technical education.

Under the IVEP, the predecessor to the NAVTEP, the Congress authorized the Secretary to provide financial assistance to Indian tribes and certain schools funded by the Department of the Interior to plan, conduct, and administer projects, or portions of projects, that are authorized by and consistent with the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (20 U.S.C. 2301 *et seq.*). Based on requests from tribal entities, the Secretary generally funded three types of projects. First, many tribal entities used funds to provide tribal members with their initial opportunity to receive vocational and technical education in a tribal setting. Second, tribal entities used grants to improve or expand existing vocational programs or develop new ones. Third, some tribal entities received grants each year to provide continuous funding for the same vocational education programs, services, or activities.

Section 116 of the Act changes many requirements under which the Secretary must administer the vocational and technical education program for Indians. Past grant recipients under the IVEP will find that statutory changes will have a noticeable impact on how tribal entities plan for and operate projects.

The following summary is intended to help the reader to become familiar with the significant changes in section 116 of the Act and the way in which these changes are reflected in the administration of the NAVTEP as compared with the IVEP.

Changes to the Program

(a) *Eligibility.* (1) Applications from a tribal organization may be submitted directly to the Secretary. Under the IVEP, Indian tribes were required to submit the applications of tribal organizations.

(2) Alaska Native entities are eligible to apply for and receive an award under the NAVTEP whereas, under the IVEP, they were not.

(3)(i) Bureau-funded schools proposing to use their awards to fund secondary vocational and technical education programs are no longer eligible for direct funding from the Secretary under the NAVTEP.

(ii) Although Bureau-funded schools proposing to fund secondary programs are not eligible to receive an award directly from the Secretary, an Indian tribe, tribal organization, Alaska Native entity, or eligible Bureau funded school may use its award to assist a secondary school operated or supported by the Bureau of Indian Affairs to carry out vocational and technical education programs.

(4) A Bureau-funded school that is not proposing a secondary program is eligible for assistance under the NAVTEP. Under the IVEP, Bureau-funded schools proposing postsecondary programs were not eligible for funding. This change will enable the Bureau-funded schools for which assistance is provided under the Tribally Controlled Schools Act to receive an award under the NAVTEP. (20 U.S.C. 2326(b)(1), (3), and (6))

(b) *Appeals process.* (1) Any applicant may request a hearing to review the Secretary's decision not to make an award under the NAVTEP, whereas under the IVEP only tribal organizations could request a hearing.

(2) The Secretary will implement the appeals process in accordance with the procedures in 34 CFR 401.23, except that the Secretary will accept a request for a hearing from any applicant denied funding under the NAVTEP. Any applicant denied funding under the competition outlined in this notice has 30 calendar days to make a written request to the Secretary for a hearing to review the Secretary's decision.

(c) *Authorized projects, services, activities.* (1) *Improvement.* Section 116(e) of the Act requires the Secretary to ensure that activities funded under the NAVTEP "will improve vocational and technical education programs..." (20 U.S.C. 2326(e)). Through this new provision Congress has expressed its intent that the Department generally not continue support of ongoing Indian vocational and technical education programs. Further, the requirement in section 116(e) of the Act, that projects funded under NAVTEP serve to improve (rather than merely sustain) vocational and technical education programs, aligns the NAVTEP with other programs authorized under the Act that require recipients of funds under the Act to develop challenging academic standards and improve vocational and technical education.

In light of section 116(e) of the Act, the Department generally does not intend to provide continuous funding for the same vocational education programs, services, or activities. The Department will, however, continue to support projects that develop new programs, services, or activities or improve or expand existing programs, services, or activities. In other words, the Department will support "expansion" or "improvements" that include, but are not limited to, the expansion of effective programs or practices; upgrading of activities, equipment, or materials; increasing staff capacity; adoption of new technology; modification of curriculum; or implementation of new policies to improve program effectiveness and outcomes.

The Secretary believes that some programs, services, and activities, by their very nature, improve vocational and technical education and thus meet the requirement of section 116(e) of the Act. The notice provides, for the convenience of potential applicants, examples of these types of programs, services, and activities. It may become necessary for the Secretary to modify the examples as the body of knowledge improves and today's leading-edge techniques and methodologies become commonplace.

(2) *Start of services to students.* Under the IVEP, some applicants delayed the start of projects for as much as six months. Those applicants delayed services in order to recruit students and staff. In light of section 116(e) of the Act, applicants under the NAVTEP should plan to start their vocational and technical education programs as soon as possible after receiving notification of an award. The Secretary strongly encourages applicants to start their programs no later than two months after receiving notification. Under IVEP, many applicants were able to start projects soon after receiving funding because of pre-award planning. For example, while developing their applications, these applicants reached tentative agreements with prospective staff to work on the project in the event funding was received. The applicants also advertised the possibility of vocational and technical education services becoming available and, therefore, were able to quickly attract students.

(3) *Support services.* In section 3(25), the Act now uses the term "support services" to refer to services that are related to curriculum modification, equipment modification, classroom modification, supportive personnel, and instructional aids. The Carl D. Perkins

Vocational and Applied Technology Education Act of 1990 used the term "supplementary services" to refer to those services. This change in terminology may create confusion for former grantees under the IVEP who, as a matter of practice, generally used the term "support services" to refer to dependent care, transportation, books, and supplies. In order to avoid confusion, under the NAVTEP the Secretary will use the term "direct assistance to students" to refer to tuition, dependent care, transportation, books, and supplies.

While the Act does not explicitly authorize the use of funds for direct assistance to students, the legislative history of the Act indicates that Congress intended to give eligible entities the flexibility to continue these services to the extent they were previously provided. In view of the legislative history and amendments to the Act, the Secretary believes the Congress intended to give eligible entities the flexibility to provide direct assistance to special populations under certain, limited circumstances.

The Secretary realizes the importance of this direct assistance to students and strongly encourages potential applicants to strengthen and multiply their efforts to coordinate with Federal, State, and local entities for the provision of these services.

(d) *Integration of services.* Funds under the NAVTEP may be integrated with assistance received from related programs in accordance with the provisions of Pub. L. 102-477, the Indian Employment, Training and Related Services Demonstration Act of 1992. Integration of services was not authorized under the IVEP.

(e) *Supplanting.* In accordance with section 311(a) of the Act, funds under this program may not be used to supplant non-Federal funds used to carry out vocational and technical education activities and tech-prep activities. Further, the prohibition against supplanting also means that grantees are required to use their negotiated restricted indirect cost rate under this program. (34 CFR 75.563). A supplanting provision did not apply to grantees under the IVEP.

Each year a few applicants propose to supplant tribal and other non-Federal funds with Federal funds in order to pay the costs of students' tuition, dependent care, transportation, books, supplies, and other costs associated with participation in a vocational and technical education program. With the new statutory prohibition against supplanting, the Secretary cautions applicants not to plan to use funds

under the NAVTEP to replace otherwise available non-Federal funding for "direct assistance to students" and family assistance programs.

Further, the Secretary is concerned that funds under the NAVTEP may be used to replace Federal student financial aid. The Secretary wishes to highlight that the statute does not authorize the Secretary to fund projects that serve primarily as entities through which students may apply for and receive tuition and other financial assistance.

(f) *Limitation on services.* Section 315 of the Act prohibits the use of funds received under the Act to provide vocational and technical education programs to students prior to the seventh grade.

(g) *Evaluation.* In order to ensure the high quality of NAVTEP projects and the achievement of the purposes of section 116 of the Act, this notice includes a requirement for projects to evaluate their quality and effectiveness. Along with being consistent with the Act's requirement that recipients measure levels of performance, the notice is harmonious with the Department's promotion of accountability and performance measures under the Government Performance and Results Act (GPRA).

Definitions

Act of April 16, 1984 means the Federal law commonly known as the "Johnson-O'Malley Act" that authorizes the Secretary of the Interior to make contracts for the education of Indians and other purposes (25 U.S.C. 455-457).

Acute economic need means an income that is at or below the national poverty level according to the latest available data from the Department of Commerce or the Department of Health and Human Services Poverty Guidelines.

Alaska Native or Native means—

(a) A citizen of the United States who is a person of one-fourth degree or more Alaska Indian (including Tsimshian Indians not enrolled in the Metlakta Indian Community) Eskimo, or Aleut blood, or a combination thereof.

(b) The term includes—

(1) Any Native, as so defined, either or both of whose adoptive parents are not Natives; and

(2) In the absence of proof of a minimum blood quantum, any citizen of the United States who is regarded as an Alaska Native by the Native village or Native group of which he or she claims to be a member and whose father or mother is (or, if deceased, was) regarded as Native by any village or group. Any decision of the Secretary of Interior

regarding eligibility for enrollment shall be final. (20 U.S.C. 2326(a)(1); 43 U.S.C. 1602(b)).

Alaska Native entity means an entity such as an Alaska Native village, group, or regional or village corporation. (20 U.S.C. 2326; 43 U.S.C. 1602(c), (d), (g), and (j)).

Alaska Native group means any tribe, band, clan, village, community, or village association of Natives in Alaska composed of less than twenty-five Natives, who comprise a majority of the residents of the locality. (43 U.S.C. 1602(d)).

Alaska Native village means any tribe, band, clan, group, village, community, or association in Alaska—

(a) Listed in sections 1610 and 1615 of the Alaska Native Claims Settlement Act; or

(b) That meets the requirements of chapter 33 of the Alaska Native Claims Settlement Act; and

(c) That the Secretary of Interior determines was, on the 1970 census enumeration date (as shown by the census or other evidence satisfactory to the Secretary of Interior, who shall make findings of fact in each instance), composed of twenty-five or more Natives. (43 U.S.C. 1602(c)).

Alaska regional corporation means an Alaska Native regional corporation established under the laws of the State of Alaska in accordance with the provisions of chapter 33 of the Alaska Native Claims Settlement Act. (43 U.S.C. 1602(g)).

Alaska village corporation means an Alaska Native Village Corporation organized under the laws of the State of Alaska as a business for profit or nonprofit corporation to hold, invest, manage and/or distribute lands, property, funds, and other rights and assets for and on behalf of a Native village in accordance with the terms of chapter 33 of the Alaska Native Claims Settlement Act. (43 U.S.C. 1602(j)).

Bureau means the Bureau of Indian Affairs of the U.S. Department of the Interior. (25 U.S.C. 2026(2)).

Bureau-funded school means—

(a) A Bureau operated elementary or secondary day or boarding school or Bureau-operated dormitory for students attending a school other than a Bureau school. (25 U.S.C. 2026(4));

(b) An elementary or secondary school or dormitory which receives financial assistance for its operation under a contract, grant, or agreement with the Bureau under section 102, 103(a), or 208 of the Indian Self-Determination Act (25 U.S.C. 450f, 450h(a), or 458d) or under the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2504). (25 U.S.C. 2026(5)); or

(c) A school for which assistance is provided under the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2501 *et seq.*). (25 U.S.C. 2026(3)).

Coherent sequence of courses means a series of courses in which vocational and academic education is integrated, and which directly relates to, and leads to, both academic and occupational competencies. The term includes competency-based education and academic education.

Direct assistance to students means tuition, dependent care, transportation, books, and supplies.

Indian means a person who is a member of an Indian tribe. (20 U.S.C. 2326(a)(3); 25 U.S.C. 450b(d)).

Indian tribe means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 *et seq.*) that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. (20 U.S.C. 2326(a)(3); 25 U.S.C. 450b(e)).

Institution of higher education means—

(a) An educational institution in any State that—

(1) Admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate;

(2) Provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree;

(3) Is a public or other nonprofit institution; and

(4) Is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted preaccreditation status by such an agency or association that has been recognized by the Secretary of the Interior for the granting of preaccreditation status, and the Secretary of Interior has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time.

(b) The term also includes—

(1) Any school that provides not less than a 1-year program of training to prepare students for gainful employment in a recognized occupation and that meets the provisions of paragraphs (a)(1), (3), and (4) of this definition.

(2) A public or nonprofit private educational institution in any State that, in lieu of the requirement in paragraph (a)(1) of this definition, admits as regular students persons who are beyond the age of compulsory school attendance in the State in which the institution is located.

(Authority: 20 U.S.C. 1001 and 2302(28))

Special populations means—

(a) Individuals with disabilities;

(b) Individuals from economically disadvantaged families, including foster children;

(c) Individuals preparing for nontraditional training and employment;

(d) Single parents, including single pregnant women;

(e) Displaced homemakers; and

(f) Individuals with other barriers to educational achievement, including individuals with limited English proficiency. (20 U.S.C. 2302(23)).

Stipend means a subsistence allowance for a student that is necessary for the student to participate in a project funded under this program.

Tribal organization means the recognized governing body of any Indian tribe; any legally established organization of Indians that is controlled, sanctioned, or chartered by that governing body or that is democratically elected by the adult members of the Indian community to be served by the organization and that includes the maximum participation of Indians in all phases of its activities, provided that in any case where a contract is let or grant made to an organization to perform services benefiting more than one Indian tribe, the approval of each such Indian tribe shall be a prerequisite to the letting or making of such contract or grant. (20 U.S.C. 2326(a)(3); 25 U.S.C. 450b(1)).

Tribally Controlled College or University means an institution of higher education which is formally controlled, or has been formally sanctioned, or chartered, by the governing body of an Indian tribe or tribes, except that no more than one such institution shall be recognized with respect to any such tribe.

(Authority: 20 U.S.C. 2302(27) and 25 U.S.C. 1801(a)(4))

Vocational and technical education means organized educational activities that—

(a) Offer a sequence of courses that provides an individual with the academic and technical knowledge and skills the individual needs to prepare for further education and careers (other than careers requiring a baccalaureate, master's, or doctoral degree) in current or emerging employment sectors; and

(b) Include competency-based applied learning that contributes to an individual's academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupational-specific skills of an individual. (20 U.S.C. 2302(29)).

Eligible Programs, Services, and Activities

(a) *Authorized programs.* Under this competition—

(1) The Secretary awards grants to carry out projects that improve vocational and technical education programs that are consistent with the purposes of the Act.

(2) In order to ensure that grants awarded will serve to improve vocational and technical education programs, the Secretary funds a vocational and technical education program, service, or activity that—

(i) Is new—was not provided by the applicant during the instructional term that preceded the request for funding under the NAVTEP;

(ii) Will improve or expand an existing vocational and technical education program; or

(iii) Inherently improves vocational and technical education.

(3) A program, service, or activity inherently improves vocational and technical education if it proposes to—

(i) Strengthen the academic, vocational, and technical skills of students participating in vocational and technical education programs—

(A) By strengthening the rigor of the academic and vocational and technical components of programs; and

(B) Through the integration of academics with vocational and technical education programs through a coherent sequence of courses to ensure learning in the core academic and vocational and technical subjects;

(ii) Expand the scope, depth, and relevance of curriculum, especially content that provides students with a comprehensive understanding of all aspects of an industry and a variety of hands-on, job-specific experiences;

(iii) Offer—

(A) Work-related experience, internships, cooperative education, school-based enterprises, entrepreneurship, community service learning, and job shadowing that are related to vocational and technical education programs;

(B) Coaching/mentoring and support services, extra help for students after school, on the weekends, and/or during the summers so they can meet higher standards;

(C) Career guidance and academic counseling for students participating in

vocational and technical education programs under the NAVTEP;

(D) Placement services for students who have successfully completed vocational and technical education programs under the NAVTEP;

(E) Professional development programs for teachers, counselors, and administrators; or

(F) Strong partnerships among grantees and local educational agencies, postsecondary institutions, community leaders, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, parents, and local partnerships, to enable students to achieve State academic standards and vocational and technical skills;

(iv) Use student assessment and evaluation data to continually improve instruction and staff development with the goal of increasing student achievement; or

(v) Perform research, development, demonstration, dissemination, evaluation and assessment, capacity building, and technical assistance.

(b) *Assistance to Bureau-funded secondary schools.* An Indian tribe, a tribal organization, an Alaska Native entity, or eligible Bureau-funded school that receives an award under this program may use all or a portion of the funds to provide assistance to a secondary school operated or supported by the Bureau of Indian Affairs to enable that school to carry out vocational and technical education programs.

(c) *Student stipends.* (1) A portion of an award under this program may be used to provide stipends to a student to help meet the costs of participation in a NAVTEP project.

(2) The student must—

(i) Be enrolled in a vocational and technical education project funded under this program;

(ii) Be in regular attendance in a NAVTEP project and meet the training institution's attendance requirement; and

(iii) Maintain satisfactory progress in his or her course of study according to the training institution's published standards for satisfactory progress.

(iv) Have an acute economic need that—

(A) Prevents participation in a project funded under this program; and

(B) Cannot be met through a work-study program.

(3) The amount of a stipend may be the greater of either the minimum hourly wage prescribed by State or local law, or the minimum hourly wage established under the Fair Labor Standards Act.

(4) A grantee may only award a stipend if the stipend combined with

other resources the student receives does not exceed the student's financial need. A student's financial need is the difference between the student's cost of attendance and the financial aid or other resources available to defray the student's cost of attending a NAVTEP project.

(5) To calculate the amount of a student's stipend, a grantee would multiply the number of hours a student actually attends vocational and technical education instruction by the amount of the minimum hourly wage that is prescribed by State or local law, or by the minimum hourly wage that is established under the Fair Labor Standards Act.

Example: If a grantee uses the Fair Labor Standards Act minimum hourly wage of \$6.15 and a student attends classes for 20 hours a week, the student's stipend would be \$123 for the week during which the student attends classes ($\$6.15 \times 20 = 123$).

(d) *Direct assistance to students.* (1) A grantee may provide direct assistance to a student if the following conditions are met:

(A) The recipient of the direct assistance must be an individual who is a member of a special population and who is participating in a NAVTEP project.

(B) Direct assistance may only be provided to an individual to the extent that it is needed to address barriers to the individual's successful participation in a NAVTEP project.

(C) Direct assistance to individuals must be part of a broader, more generally focused effort to address the needs of individuals who are members of special populations. Direct assistance to individuals who are members of special populations is not, by itself, a "program for special populations".

(D) Funds must be used to supplement, and not supplant, assistance that is otherwise available from non-Federal sources. For example, generally, a postsecondary educational institution could not use NAVTEP funds to provide child care for single parents if non-Federal funds previously were made available for this purpose, or if non-Federal funds are used to provide child care services for single parents participating in non-vocational programs and these services otherwise would have been available to vocational students in the absence of NAVTEP funds.

(2) In determining how much of the grant funds may be used for direct assistance to a student, a grantee must consider whether:

(A) The specific services to be provided are a reasonable and necessary

cost of providing programs for special populations.

(B) The amount of the grant that would be used for these services (both on an item-by-item basis and in the aggregate compared to the amount of the entire grant) would be consistent with the predecessor authority to fund support services under the IVEP.

Integration of Services

(a) A tribe, tribal organization, or Alaska Native entity receiving financial assistance under this program may integrate those funds with assistance received from related programs in accordance with the provisions of Pub. L. 102-477, the Indian Employment, Training and Related Services Demonstration Act of 1992 (25 U.S.C. 3401 *et seq.*).

(b) A tribe, tribal organization, or Alaska Native entity wishing to integrate funds must have a plan that meets the requirements of the Indian Employment, Training and Related Services Demonstration Act of 1992 (25 U.S.C. 3401 *et seq.*) and is acceptable to the Secretary of the Interior and the Secretary of Education.

For further information on the integration of grant funds under this and related programs contact Lynn Forcia, Chief, Division of Job Placement and Training, Office of Economic Development, Bureau of Indian Affairs, U.S. Department of the Interior, 1849 C Street NW., Mailstop 4640-MIB, Washington, DC 20240. Telephone: (202) 219-5270. Internet address: Lynn_Forcia@ios.doi.gov. Fax: (202) 208-3664.

Special Considerations

In addition to the points to be awarded to applicants based on the selection criteria, under section 116(e) of the Act the Secretary awards—

(a) Up to 10 points to applications that propose exemplary approaches that involve, coordinate with, or encourage tribal economic development plans; and

(b) Five points to applications from tribally controlled colleges or universities that—

(1) Are accredited or are candidates for accreditation by a nationally recognized accreditation organization as an institution of postsecondary vocational and technical education; or

(2) Operate vocational and technical education programs that are accredited or are candidates for accreditation by a nationally recognized accreditation organization and issue certificates for completion of vocational and technical education programs. (20 U.S.C. 2326(e)).

Selection Criteria

The Secretary uses the following program criteria to evaluate an application. The maximum score for each criterion is indicated in parentheses.

(a) *Need for project.* (15 points) (1) The Secretary considers the need for the proposed project.

(2) In determining the need for the proposed project, the Secretary considers the following factors:

(i) The magnitude or severity of the problem to be addressed by the proposed project.

(ii) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project (as evidenced by data such as local labor market demand, occupational trends, surveys, recommendations from accrediting agencies, or tribal economic development plans).

(iii) The extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and will be addressed by the proposed project, including the nature and magnitude of those gaps or weaknesses.

(b) *Significance.* (10 points) (1) The Secretary considers the significance of the proposed project.

(2) In determining the significance of the proposed project, the Secretary considers the following factors:

(i) The potential contribution of the proposed project to increased knowledge or understanding of educational needs, issues, or effective educational strategies for providing vocational and technical education to American Indians and Alaska Natives.

(ii) The likelihood that the proposed project will result in system change or improvement in the applicant's educational program.

(iii) The extent to which the proposed project is likely to build local capacity to provide, improve, or expand services that address the vocational and technical education needs of the target population.

(iv) The extent to which the results of the proposed project are to be disseminated in ways that will enable vocational and technical education practitioners to use the information or strategies developed by the proposed project.

(v) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

(c) *Quality of the project design.* (25 points) (1) The Secretary considers the quality of the project design.

(2) In determining the quality of the design of the proposed project, the Secretary considers the following factors:

(i) The extent to which goals, objectives, and outcomes are clearly specified and measurable (*e.g.*, student vocational and technical education activities; expected enrollments, completions, and student placements in jobs, military specialties, and continuing education/training opportunities in each vocational training area; the number of teachers, counselors, and administrators to be trained; identification of requirements for each course of study to be provided under the project, including related training areas; description of performance outcomes; and description of the planned dissemination activities, including the number and names of products or practices to be disseminated, target audience for dissemination activities, and intended uses for disseminated products or services).

(ii) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

(iii) The extent to which the design for implementing and evaluating the proposed project will result in information to guide possible replication of project activities or strategies, including information about the effectiveness of the approach or strategies employed by the project.

(iv) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

(v) The extent to which the proposed project will be coordinated with similar or related efforts, and with other appropriate community, State, and Federal resources.

(vi) The extent to which the proposed project will establish linkages with other appropriate agencies and organizations providing services to the target population.

(vii) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.

(viii) The quality of the methodology to be employed in the proposed project.

(d) *Quality of project services.* (25 points) (1) The Secretary considers the quality of the services to be provided by the proposed project.

(2) In determining the quality of the services to be provided by the proposed project, the Secretary considers the following factors:

(i) The extent to which the services to be provided by the proposed project are appropriate to the needs of the intended recipients of those services.

(ii) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

(iii) The likely impact of the services to be provided by the proposed project on the intended recipients of those services.

(iv) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

(v) The extent to which the training or professional development services to be provided by the proposed project for the staff of its vocational and technical education program are of sufficient quality, intensity, and duration to lead to improvements in practice among the applicant's staff.

(vi) The likelihood that the services to be provided by the proposed project will lead to improvements in the skills necessary to gain employment.

(vii) The likelihood that the services to be provided by the proposed project will lead to improvements in the achievement of students as measured against rigorous academic standards.

(viii) The likelihood that the services to be provided by the proposed project will lead to improvements in the skills necessary to gain employment or build capacity for independent living.

(e) *Quality of project personnel.* (15 points) (1) The Secretary considers the quality of the personnel who will carry out the proposed project.

(2) In determining the quality of project personnel, the Secretary considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on color, national origin, gender, age, or disability.

(3) In addition, the Secretary considers the following factors:

(i) The qualifications, including relevant training and experience, of the project director.

(ii) The qualifications, including relevant training and experience, of key project personnel, especially the extent to which the project will use instructors who are certified to teach in the field in which they will provide instruction.

(iii) The qualifications, including relevant training and experience, of project consultants or subcontractors.

(f) *Adequacy of resources.* (5 points) (1) The Secretary considers the adequacy of resources for the proposed project.

(2) In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:

(i) The adequacy of support, including facilities, equipment, supplies and other resources, from the applicant organization(s).

(ii) The relevance and demonstrated commitment (*e.g.*, articulation agreements, memoranda of understanding, letters of support, commitments to employ project participants) of the applicant, members of the consortium, local employers, or tribal entities to be served by the project, to the implementation and success of the project.

(iii) The extent to which the budget is adequate to support the proposed project.

(iv) The extent to which the costs are reasonable in relation to the objectives, design, services, and potential significance of the proposed project.

(v) The extent to which the costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits.

(vi) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to provide such support.

(g) *Quality of the management plan.* (10 points) (1) The Secretary considers the quality of the management plan for the proposed project.

(2) In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

(i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and the milestones and performance standards for accomplishing project tasks.

(ii) The extent to which the time commitments of the project director and principal investigator and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.

(iii) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

(iv) The adequacy of mechanisms for ensuring high-quality products and services from the proposed project.

(h) *Quality of the project evaluation.* (20 points)

(1) The Secretary considers the quality of the evaluation to be conducted by an independent evaluator of the proposed project.

(2) In determining the quality of the evaluation, the Secretary considers the following factors:

(i) The extent to which the methods of evaluation proposed by the grantee are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

(ii) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and the GPRA core factors discussed elsewhere in this notice, and will produce quantitative and qualitative data to the extent possible.

(iii) The extent to which the methods of evaluation will provide timely guidance for quality assurance.

(iv) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

(v) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings. (Approved by the Office of Management and Budget under Control No. 1830-0542)

Additional Factors

After evaluating applications according to the selection criteria in this notice, the Secretary may select other than the most highly rated applications for funding if doing so would—

(a) Permit the funding of more cost-effective projects;

(b) Prevent the duplication of an effort already being made;

(c) Create a more equitable distribution of funds under this competition among Indian tribes, tribal organizations, Alaska Native entities, or eligible Bureau-funded schools;

(d) Prevent the funding of an applicant who performed poorly under a previous award under this program, especially one who failed to accomplish the project objectives; or

(e) Permit the funding of a variety of approaches for carrying out the activities under the NAVTEP.

Program Requirements

To ensure the high quality of NAVTEP projects and the achievement of the goals and purposes of section 116(e) of the Act, the Secretary establishes the following program requirements:

(a) *Evaluation.* (1) Each grantee shall budget for and conduct an ongoing evaluation of its effectiveness. An

independent evaluator must conduct the evaluation.

(2) The evaluation must—

(i) Be appropriate for the project and be both formative and summative in nature;

(ii) Include performance measures that are clearly related to the intended outcomes of the project and the GPRA core factors for the NAVTEP;

(iii) Measure the effectiveness of the project, including a comparison between the intended and observed results, and a demonstration of a clear link between the observed results and the specific treatment given to project participants;

(iv) Measure the extent to which information about or resulting from the project was disseminated and the ease by which project activities and results were replicated at other sites, such as through the grantee's development and use of guides or manuals that provide step-by-step directions for practitioners to follow when initiating similar efforts and reproducing comparable results; and

(v) Measure the long-term impact of the project, *e.g.*, follow-up data on students' employment, sustained employment, promotions, advancement in the military, further/continuing education or training, or the impact the project had on tribal economic development or vocational and technical education activities offered by tribes.

(3) A proposed project evaluation design must be submitted to the Department for review and approval prior to the end of the first six months of the project period.

(4) As required in paragraph (b)(2) of the "PROGRAM REQUIREMENTS" section of this notice, the results of the evaluation must be submitted to the Secretary along with the annual performance report.

(b) *Reporting.* Each grantee shall submit to the Secretary the following reports—

(1) A semi-annual performance report, unless the Secretary requires more frequent reporting, summarizing significant project accomplishments and, if applicable, barriers impeding progress and steps taken to alleviate those barriers.

(2) A performance report must include—

(i) A comparison of actual accomplishments to the objectives established for the period. Describe any problems, delays, or adverse conditions that materially impair the ability of the project to accomplish its purposes, along with the reasons for slippage and

an explanation of any action taken or contemplated to resolve the difficulties;

(ii) A description of any favorable developments that will permit the project to accomplish its purposes sooner, at less cost, or more effectively than projected; and

(iii) A statistical report covering quantitative analyses of—

(A) The extent to which the project achieved its goals with respect to enrollment, completion, and placement (into additional training or education, military service, or employment) of participants for the most recently completed training cycle(s) by gender and by courses of study for which instruction was provided;

(B) The number and kind of academic, vocational and technical, and work credentials and competencies acquired and demonstrated by individuals participating in the project, including the number of those who have completed the education and training offered by the project. Grantees should also report students' participation in programs providing instruction at the associate degree level that is articulated with an advanced degree option; and

(C) The number of referrals to social or related services that were intended to improve the extent to which participants benefit from the project (*e.g.*, referring a student to an agency that will help her to obtain child care or health care, which would result in improved classroom attendance) or to prepare for or obtain employment.

(3) An annual evaluation report that is submitted along with the annual performance report. (Approved by the Office of Management and Budget under Control Number 1830-0542)

Indian Self-Determination Contracts

Section 116(b)(2) of the Act provides that grants or contracts awarded under section 116 are subject to the terms and conditions of section 102 of the Indian Self-Determination Act (ISDA)(25 U.S.C. 450f) and shall be conducted in accordance with the provisions of sections 4, 5, and 6 of the Act of April 16, 1934, which are relevant to the programs administered under section 116(b). Section 102 of the ISDA authorizes Indian tribes to request self-determination contracts. Accordingly, an Indian tribe or tribal organization that has applied to the Secretary for financial assistance under the NAVTEP and has been notified of its selection to be a recipient of financial assistance may submit a request to operate its NAVTEP project through a section 102 Indian self-determination contract.

In accordance with section 102(a) of the ISDA, any tribe or tribal

organization requesting to operate its project under an Indian self-determination contract must do so by tribal resolution. After successful applicants are selected under the competition announced in this notice, the Secretary will review any such requests pursuant to the ISDA. If a request for an Indian self-determination contract is approved, the Indian tribe or tribal organization submitting the request will be required, to the extent possible, to operate its project in accordance with the terms of the ISDA, as well as in accordance with the relevant provisions of the NAVTEP statute and the program requirements established in this notice. As with grants, self-determination contracts under the NAVTEP are limited to a 36-month period and subject to the availability of funds. The vocational and technical education programs, services, and activities provided through an Indian self-determination contract would have to be essentially the same as were proposed in the initial application and approved by the Department. Any tribe or tribal organization that is successful under the competition announced in this notice and is selected to receive funding, but whose request for an Indian self-determination contract is denied, may appeal the denial to the Secretary. If you have questions about ISDA self-determination contracts, please contact the staff listed in the **FOR FURTHER INFORMATION CONTACT** section of this notice.

Government Performance and Results Act (GPRA)

The Government Performance and Results Act of 1993 (GPRA) places new management expectations and requirements on Federal departments and agencies by creating a framework for more effective planning, budgeting, program evaluation, and fiscal accountability for Federal programs. The intent of the Act is to improve public confidence by holding departments and agencies accountable for achieving program results. Departments and agencies must clearly describe the goals and objectives of their programs, identify resources and actions needed to accomplish these goals and objectives, develop a means of measuring progress made, and regularly report on their achievement. One important source of program information on successes and lessons learned is the project evaluation conducted under individual grants. NAVTEP grantees shall include the following core factors in evaluating the success of their projects:

(a) *Students master academic knowledge and skills that meet challenging State defined (at the secondary level) or program defined (at the postsecondary level) academic standards as measured by—*

(1) At the secondary level, an increase in the number of vocational and technical education students who show increased score gains in language arts, mathematics, science, and social studies; and

(2) At the postsecondary level, an increase in the number of vocational and technical education students who receive degrees, certificates, or credentials.

(b) *Students master the knowledge and skills that meet State established (at the secondary level) or program established (at the postsecondary level), industry-validated vocational and technical skill standards as measured by—*

(1) An increase in the number of programs with industry-recognized skill standards so students can earn skill certificates in those programs; and

(2) An increase in the number of programs offering skill competencies, related assessments, and industry-recognized skills certificates in secondary and postsecondary institutions.

(c) *Student attainment of a secondary school diploma or its State-recognized equivalent, proficiency credentials in conjunction with a secondary school diploma, or a postsecondary degree or credential as measured by an increase in the number of vocational and technical education students who—*

(1) At the secondary level—

(i) Attain high school diplomas; or

(ii) Attain a proficiency credential in conjunction with a secondary school diploma or its State-recognized equivalent; or

(2) At the postsecondary level, attain postsecondary degrees, certificates, and credentials.

(d) *Placement in, retention in, and completion of, postsecondary education or advanced training, placement in military services, or placement or retention in employment as measured by an increase in the number of vocational and technical education students who—*

(1) Graduate from secondary programs and enter postsecondary programs;

(2) Graduate from postsecondary programs and enter advanced degree programs or advanced training;

(3) Remain in and/or complete a postsecondary degree or certificate program;

(4) Are placed in military service; or

(5) Are placed in a job, upgraded in a job, or retain employment.

(e) *Student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment as measured by an increase in the number of vocational and technical education students who—*

(1) Enroll in nontraditional training programs; and

(2) Secure employment in nontraditional job/careers. (Approved by the Office of Management and Budget under Control Number 1830-0542)

Waiver of Rulemaking

Under the Administrative Procedure Act (5 U.S.C. 553) the Department generally offers interested parties the opportunity to comment on proposed program requirements before they are implemented. However, section 437(d)(1) of the General Education Provisions Act exempts from formal rulemaking requirements, regulations governing the first grant competition under a new or substantially revised program authority (20 U.S.C. 1232(d)(1)). The program authority for what was formerly known as the Indian Vocational Education Program was substantially revised on October 31, 1998 by section 116 of Pub. Law 105-332. In order to make awards on a timely basis, the Assistant Secretary has decided to publish this notice of program requirements without requesting public comment, under the authority of section 437(d)(1). Any requirements, criteria, or regulations that the Department establishes for future competitions will be published in proposed form in the **Federal Register** with an opportunity for interested persons to comment.

The Assistant Secretary is not promulgating any regulations through this notice applicable to section 116(b)(2) of the Act, relating to certain sections of the Indian Self-Determination Act and the Act of April 16, 1934. However, the Assistant Secretary is interested in receiving future public comment and suggestions on the Department's implementation of section 116 of the Act and on whether any regulations may be needed in the future. Please send written public comments on this issue to Sharon A. Jones, Division of National Programs, Office of Vocational and Adult Education, U.S. Department of Education, 400 Maryland Avenue, SW. (Room 4515, Mary E. Switzer Building), Washington, DC 20202-7242. Telephone (202) 205-9870. Internet addresses: sharon_jones@ed.gov.

Instructions for Transmittal of Applications

Applicants are required to submit one original signed application and two copies of the application. All forms and assurances must have ink signatures. Please mark applications as "original" or "copy". To aid with the review of applications, the Department encourages applicants to submit four additional paper copies of the application. The Department will not penalize applicants who do not provide additional copies.

(a) If an applicant wants to apply for a grant under this competition, the applicant must either—

(1) Mail the original and two copies of the application on or before the deadline date to:

U.S. Department of Education,
Application Control Center,
Attention: (CFDA #84.101),
Washington, DC 20202-4725, or

(2) Hand deliver the original and two copies of the application by 4:30 p.m. (Washington, DC time) on or before the deadline date to:

U.S. Department of Education,
Application Control Center,
Attention: (CFDA #84.101), Room
#3633, Regional Office Building #3,
7th and D Streets, SW., Washington,
DC

(b) An applicant must show one of the following as proof of mailing:

(1) A legibly dated U.S. Postal Service postmark.

(2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.

(3) A dated shipping label, invoice, or receipt from a commercial carrier.

(4) Any other proof of mailing acceptable to the Secretary.

(c) If an application is mailed through the U.S. Postal Service, the Secretary does not accept either of the following as proof of mailing:

(1) A private metered postmark.

(2) A mail receipt that is not dated by the U.S. Postal Service.

Notes: (1) The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, an applicant should check with its local post office.

(2) The Application Control Center will mail a Grant Application Receipt Acknowledgment to each applicant. If an applicant fails to receive the notification of application receipt within 15 days from the date of mailing the application, the applicant should call the U.S. Department of Education Application Control Center at (202) 708-9494.

(3) The applicant must indicate on the envelope and—if not provided by the Department—in Item 10 of the Application for Federal Assistance (ED Form 424) the

CFDA number—and suffix letter, if any—of the competition under which the application is being submitted.

Application Instructions and Forms

All forms and instructions are included as Appendix A of this notice. Questions and answers pertaining to this program are included, as Appendix B, to assist potential applicants.

To apply for an award under this program competition, an application must be organized in the following order, include the following five parts, and **CONTAIN DOCUMENTATION SHOWING THAT THE APPLICANT AND, IF APPROPRIATE, CONSORTIUM MEMBERS ARE ELIGIBLE ACCORDING TO THE REQUIREMENTS IN THE "ELIGIBLE APPLICANTS" SECTION OF THIS NOTICE.** The parts and additional materials are as follows:

(1) Application for Federal Education Assistance (ED Form 424 (Rev. 1-12-99)) and instructions.

(2) Budget Information—Non-Construction Programs (ED Form No. 524) and instructions.

(3) Budget Narrative.

(4) Program Narrative.

(5) Additional Assurances and Certifications:

a. Assurances—Non-Construction Programs (Standard Form 424B).

b. Certification regarding Lobbying, Debarment, Suspension, and Other Responsibility Matters; and Drug-Free Workplace Requirements (ED 80-0013) and instructions.

c. Certification regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion: Lower Tier Covered Transactions (ED Form 80-0014, 9/90) and instructions.

Note: ED Form 80-0014 is intended for the use of grantees and should not be transmitted to the Department.

d. Disclosure of Lobbying Activities (Standard Form LLL), if applicable, and instructions. This document has been marked to reflect statutory changes. See the notice published by the Office of Management and Budget at 61 FR 1413 (January 19, 1996).

e. Notice to All Applicants.

No grant or cooperative agreement may be awarded unless a completed application form has been received.

FOR FURTHER INFORMATION CONTACT: Paul Geib, Linda Mayo, or Gwen Washington, Special Programs Branch, Division of National Programs, Office of Vocational and Adult Education, U.S. Department of Education, 400 Maryland Avenue, SW. (Room 4520, Mary E. Switzer Building), Washington, DC 20202-7242. Telephone (202) 205-9962, 205-9353, or 205-9270, respectively. Internet addresses:

paul_geib@ed.gov
linda_mayo@ed.gov
gwen_washington@ed.gov

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m. Eastern time, Monday through Friday. Individuals with disabilities may obtain this notice in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to the contact person listed at the beginning of this paragraph. Please note, however, that the Department is not able to reproduce in an alternative format the standard forms included in the notice.

Electronic Access to This Document

You may view this document, as well as all other Department of Education documents published in the **Federal Register**, in text or Adobe Portable Document Format (PDF) on the Internet at either of the following sites:

<http://ocfo.ed.gov/fedreg.htm>
<http://www.ed.gov/news.html>

To use PDF you must have Adobe Acrobat Reader, which is available free at either of the preceding sites. If you have questions about using PDF, call the U.S. Government Printing Office (GPO), toll free, at 1-888-293-6498; or in the Washington, DC, area at (202) 512-1530.

Note: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: <http://www.access.gpo.gov/nara/index.html>

Program Authority: 20 U.S.C. 2326(a)-(g).

Dated: December 27, 2000.

Robert Muller,

Acting Assistant Secretary, Office of Vocational and Adult Education.

Estimated Public Reporting Burden

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1830-0542. Expiration date: September 30, 2003. The time required to complete this information collection is estimated to average 208 hours per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

If you have any comments concerning the accuracy of the time estimates or suggestions for improving this form, please write to: U.S. Department of

Education, Washington, DC 20202–4651.

If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Paul Geib, Linda Mayo or Gwen Washington, Division of National Programs, Office of Vocational and Adult Education, U.S. Department of Education, 400 Maryland Avenue, SW., Room 4512, Mary E. Switzer Building, Washington, DC 20202–7242.

Appendix A

Part II—Budget Information

Instructions for Part II—Budget Information Sections A and B—Budget Summary by Categories

1. *Personnel:* Show salaries to be paid to personnel for each budget year.
2. *Fringe Benefits:* Indicate the rate and amount of fringe benefits for each budget year.
3. *Travel:* Indicate the amount requested both local and out of State travel of Program Staff for each budget year. Include funds for the 1st and 2nd year for two people to attend the Program Director's Workshop.
4. *Equipment:* Indicate the cost of non-expendable personal property that has a cost of \$5,000 or more per unit for each budget year.
5. *Supplies:* Include the cost of consumable supplies and materials to be used during the project period for each budget year.
6. *Contractual:* Show the amount to be used for: (1) procurement contracts (except those which belong on other lines such as supplies and equipment); and (2) sub-contracts for each budget year.
7. *Construction:* Not applicable.
8. *Other:* Indicate all direct costs not clearly covered by lines 1 through 6 above, including consultants and capital expenditures for each budget year.
9. *Total Direct Cost:* Show the total for Lines 1 through 8 for each budget year.
10. *Indirect Costs:* Indicate the rate and amount of indirect costs for each budget year.
11. *Training/Stipend Cost:* Indicate cost per student and number of hours of instruction. The amount of a stipend may be the greater of the minimum hourly wage prescribed by State and local law, or the minimum hourly wage set under the Fair Labor Standards Act.
12. *Total Costs:* Show total for lines 9 through 11 for each budget year.

Instructions for Part III—Budget Narrative

The budget narrative should explain, justify, and, if needed, clarify your budget summary. For each line item (personnel, fringe benefits, travel, etc.) in your budget, explain why it is there and how you computed the costs.

Please limit this section to no more than five pages. Be sure that each page of your application is numbered consecutively.

Appendix B

Potential applicants frequently direct questions to officials of the Department regarding application notices and

programmatic and administrative regulations governing various direct grant programs. To assist potential applicants, the Department has assembled the following most commonly asked questions followed by the Department's answers.

Q. Can we get an extension of the deadline?

A. No. A closing date may be changed only under extraordinary circumstances. Any change must be announced in the **Federal Register** and must apply to all applications. Waivers for individual applications cannot be granted regardless of the circumstances.

Q. How many copies of the application should I submit and must they be bound?

A. Applicants are required to submit one original and two copies of the grant application. To aid with the review of applications, the Department encourages applicants to submit four additional copies of the grant application. The Department will not penalize applicants who do not provide additional copies. The binding of applications is optional.

Q. We just missed the deadline for the XXX competition. May we submit under another competition?

A. Yes, however, the likelihood of success is not good. A properly prepared application must meet the specifications of the competition to which it is submitted.

Q. I'm not sure which competition is most appropriate for my project. What should I do?

A. We are happy to discuss any such questions with you and provide clarification on the unique elements of the various competitions.

Q. Will you help us prepare our application?

A. We are happy to provide general program information. Clearly, it would not be appropriate for staff to participate in the actual writing of an application, but we can respond to specific questions about application requirements, evaluation criteria, and the priorities. Applicants should understand, however, that prior contact with the Department is not required, nor will it in any way influence the success of an application.

Q. When will I find out if I'm going to be funded?

A. You can expect to receive notification within 3 to 4 months of the applications received and the number of Department competitions with similar closing dates.

Q. Once my application has been reviewed by the review panel, can you tell me the outcome?

A. No. Every year we are called by a number of applicants who have a legitimate reason for needing to know the outcome of the panel review prior to official notification. Some applicants need to make job decisions, some need to notify a local school district, etc. Regardless of the reason, because final funding decisions have not been made at that point, we cannot share information about the results of the panel review with anyone.

Q. Will my application be returned if I am not funded?

A. No. We no longer return unsuccessful applications. Thus, applicants should retain at least one copy of the application.

Q. Can I obtain copies of reviewers' comments?

A. Upon written request, reviewers' comments will be mailed to unsuccessful applicants.

Q. If my application receives high scores from the reviewers, does that mean that I will receive funding?

A. Not necessarily. It is often the case that the number of applications scored highly by the reviewers exceeds the dollars available for funding projects under a particular competition. The order of selection, which is based on the scores of all the applications reviewed and other relevant factors, determines the applications that can be funded.

Q. What happens during pre-award clarification discussions?

A. During pre-award clarification discussions, technical and budget issues may be raised. These are issues that have been identified during the panel and staff reviews that require clarification. Sometimes issues are stated as "conditions." These are issues that have been identified as so critical that the award cannot be made unless those conditions are met. Questions may also be raised about the proposed budget. Generally, these issues are raised because an application contains inadequate justification or explanation of a particular budget item, or because the budget item seems unimportant to the successful completion of the project. If you are asked to make changes that you feel could seriously affect the project's success, you may provide reasons for not making the changes or provide alternative suggestions. Similarly, if proposed budget reductions will, in your opinion, seriously affect the project activities, you may explain why and provide additional justification for the proposed expenses. An award cannot be made until all issues under discussion have been resolved.

Q. How do I provide an assurance?

A. Except for SF-424B, "Assurances—Non-Construction Programs," you may provide an assurance simply by stating in writing that you are meeting a prescribed requirement.

Q. Where can copies of the Federal Register, Education Department General Administrative Regulations (EDGAR), and Federal statutes be obtained?

A. Copies of these materials can usually be found at your local library. If not, they can be obtained from the Government Printing Office by writing to Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Telephone: (202) 708–8228. When requesting copies of regulations or statutes, it is helpful to use the specific name of the public law, number of a statute, or part number of a regulation. The material referenced in this notice should be referred to as follows:

(1) The Carl D. Perkins Vocational and Technical Education Act of 1998.

(2) Education Department General Administrative Regulations, 34 CFR parts 74, 75, 77, 80, 81, 82, 85, 86, 97, 98, and 99.

Copies of these materials may also be found on the World Wide Web at <http://www.access.gpo.gov/nara>.

BILLING CODE 4000-01-P

Instructions for ED 424

1. **Legal Name and Address.** Enter the legal name of applicant and the name of the primary organizational unit which will undertake the assistance activity.
2. **D-U-N-S Number.** Enter the applicant's D-U-N-S Number. If your organization does not have a D-U-N-S Number, you can obtain the number by calling 1-800-333-0505 or by completing a D-U-N-S Number Request Form. The form can be obtained via the Internet at the following URL: <http://www.dnb.com/dbis/aboutdb/intlduns.htm>.
3. **Tax Identification Number.** Enter the tax identification number as assigned by the Internal Revenue Service.
4. **Catalog of Federal Domestic Assistance (CFDA) Number.** Enter the CFDA number and title of the program under which assistance is requested.
5. **Project Director.** Name, address, telephone and fax numbers, and e-mail address of the person to be contacted on matters involving this application.
6. **Federal Debt Delinquency.** Check "Yes" if the applicant's organization is delinquent on any Federal debt. (This question refers to the applicant's organization and not to the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.) Otherwise, check "No."
7. **Type of Applicant.** Enter the appropriate letter in the box provided.
8. **Novice Applicant.** Check "Yes" only if assistance is being requested under a program that gives special consideration to novice applicants and you meet the program requirements for novice applicants. By checking "Yes" the applicant certifies that it meets the novice applicant requirements specified by ED. Otherwise, check "No."
9. **Type of Submission.** Self-explanatory.
10. **Executive Order 12372.** Check "Yes" if the application is subject to review by Executive Order 12372. Also, please enter the month, date, and four (4) digit year (e.g., 12/12/2000). Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. Otherwise, check "No."
11. **Proposed Project Dates.** Please enter the month, date, and four (4) digit year (e.g., 12/12/2000).
12. **Human Subjects.** Check "Yes" or "No". If research activities involving human subjects are not planned at any time during the proposed project period, check "No." **The remaining parts of item 12 are then not applicable.**

If research activities involving human subjects, whether or not exempt from Federal regulations for the protection of human subjects, are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution, check "Yes." If all the research activities are designated to be exempt under the regulations, enter, in item 12a, the exemption number(s) corresponding to one or more of the six exemption categories listed in "Protection of Human Subjects in Research" attached to this form. Provide sufficient information in the application to allow a determination that the designated exemptions in item 12a, are appropriate. **Provide this narrative information in an "Item 12/Protection of Human Subjects Attachment" and insert this attachment immediately following the ED 424 face page. Skip the remaining parts of item 12.**

If some or all of the planned research activities involving human subjects are covered (nonexempt), skip item 12a and continue with the remaining parts of item 12, as noted below. In addition, follow the instructions in "Protection of Human Subjects in Research" attached to this form to prepare the six-point narrative about the nonexempt activities. **Provide this six-point narrative in an "Item 12/Protection of Human Subjects Attachment" and insert this attachment immediately following the ED 424 face page.**

tion of Human Subjects Attachment" and insert this attachment immediately following the ED 424 face page.

If the applicant organization has an approved Multiple Project Assurance of Compliance on file with the Grants Policy and Oversight Staff (GPOS), U.S. Department of Education, or with the Office for Protection from Research Risks (OPRR), National Institutes of Health, U.S. Department of Health and Human Services, that covers the specific activity, enter the Assurance number in item 12b and the date of approval by the Institutional Review Board (IRB) of the proposed activities in item 12c. This date must be no earlier than one year before the receipt date for which the application is submitted and must include the four (4) digit year (e.g., 2000). Check the type of IRB review in the appropriate box. An IRB may use the expedited review procedure if it complies with the requirements of 34 CFR 97.110. If the IRB review is delayed beyond the submission of the application, enter "Pending" in item 12c. If your application is recommended/selected for funding, a follow-up certification of IRB approval from an official signing for the applicant organization must be sent to and received by the designated ED official within 30 days after a specific formal request from the designated ED official. **If the applicant organization does not have on file with GPOS or OPRR an approved Assurance of Compliance that covers the proposed research activity, enter "None" in item 12b and skip 12c.** In this case, the applicant organization, by the signature on the application, is declaring that it will comply with 34 CFR 97 within 30 days after a specific formal request from the designated ED official for the Assurance(s) and IRB certifications.

13. **Project Title.** Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.
14. **Estimated Funding.** Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 14.
15. **Certification.** To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office.

Be sure to enter the telephone and fax number and e-mail address of the authorized representative. Also, in item 15e, please enter the month, date, and four (4) digit year (e.g., 12/12/2000) in the date signed field.

Paperwork Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1875-0106. The time required to complete this information collection is estimated to average between 15 and 45 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the estimate(s) or suggestions for improving this form, please write to:** U.S. Department of Education, Washington, D.C. 20202-4651. **If you have comments or concerns regarding the status of your individual submission of this form write directly to:** Joyce I. Mays, Application Control Center, U.S. Department of Education, 7th and D Streets, S.W. ROB-3, Room 3633, Washington, D.C. 20202-4725.

PROTECTION OF HUMAN SUBJECTS IN RESEARCH

(Attachment to ED 424)

I. Instructions to Applicants about the Narrative Information that Must be Provided if Research Activities Involving Human Subjects are Planned

If you marked item 12 on the application "Yes" and designated exemptions in 12a, **(all research activities are exempt)**, provide sufficient information in the application to allow a determination that the designated exemptions are appropriate. Research involving human subjects that is exempt from the regulations is discussed under II.B. "Exemptions," below. The Narrative must be succinct. **Provide this information in an "Item 12/Protection of Human Subjects Attachment" and insert this attachment immediately following the ED 424 face page.**

If you marked "Yes" to item 12 on the face page, and designated no exemptions from the regulations **(some or all of the research activities are nonexempt)**, address the following six points for each nonexempt activity. In addition, if research involving human subjects will take place at collaborating site(s) or other performance site(s), provide this information before discussing the six points. Although no specific page limitation applies to this section of the application, be succinct. Provide the six-point narrative and discussion of other performance sites in an **"Item 12/Protection of Human Subjects Attachment"** and insert this attachment immediately following the ED 424 face page.

(1) Provide a detailed description of the proposed involvement of human subjects. Describe the characteristics of the subject population, including their anticipated number, age range, and health status. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as children, children with disabilities, adults with disabilities, persons with mental disabilities, pregnant women, prisoners, institutionalized individuals, or others who are likely to be vulnerable.

(2) Identify the sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether the material or data will be obtained specifically for research purposes or whether use will be made of existing specimens, records, or data.

(3) Describe plans for the recruitment of subjects and the consent procedures to be followed. Include the cir-

cumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. State if the Institutional Review Board (IRB) has authorized a modification or waiver of the elements of consent or the requirement for documentation of consent.

(4) Describe potential risks (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects.

(5) Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of the subjects.

(6) Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

II. Information on Research Activities Involving Human Subjects

A. Definitions.

A research activity involves human subjects if the activity is research, as defined in the Department's regulations, and the research activity will involve use of human subjects, as defined in the regulations.

—Is it a research activity?

The ED Regulations for the Protection of Human Subjects, Title 34, Code of Federal Regulations, Part 97, define research as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge." *If an activity follows a deliberate plan whose purpose is to develop or contribute to generalizable knowledge, such as an exploratory study or the collection of data to test a hypothesis, it is research.* Activities which meet this definition constitute research whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

—Is it a human subject?

The regulations define human subject as “a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information.” (1) *If an activity involves obtaining information about a living person by manipulating that person or that person’s environment, as might occur when a new instructional technique is tested, or by communicating or interacting with the individual, as occurs with surveys and interviews, the definition of human subject is met.* (2) *If an activity involves obtaining private information about a living person in such a way that the information can be linked to that individual (the identity of the subject is or may be readily determined by the investigator or associated with the information), the definition of human subject is met.* [Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a school health record).]

B. Exemptions.

Research activities in which the only involvement of human subjects will be in one or more of the following six categories of **exemptions** are not covered by the regulations:

- (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (a) research on regular and special education instructional strategies, or (b) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation. *If the subjects are children, this exemption applies only to research involving educational tests or observations of pub-*

lic behavior when the investigator(s) do not participate in the activities being observed. [Children are defined as persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law or jurisdiction in which the research will be conducted.]

- (3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior that is not exempt under section (2) above, if the human subjects are elected or appointed public officials or candidates for public office; or federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

- (4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

- (5) Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (a) public benefit or service programs; (b) procedures for obtaining benefits or services under those programs; (c) possible changes in or alternatives to those programs or procedures; or (d) possible changes in methods or levels of payment for benefits or services under those programs.

- (6) Taste and food quality evaluation and consumer acceptance studies, (a) if wholesome foods without additives are consumed or (b) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Copies of the Department of Education’s Regulations for the Protection of Human Subjects, 34 CFR Part 97 and other pertinent materials on the protection of human subjects in research are available from the Grants Policy and Oversight Staff (GPOS) Office of the Chief Financial and Chief Information Officer, U.S. Department of Education, Washington, D.C., telephone: (202) 708-8263, and on the U.S. Department of Education’s Protection of Human Subjects in Research Web Site at <http://ocfo.ed.gov/humansub.htm>.



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1890-0004

Expiration Date: 02/28/2003

Name of Institution/Organization

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

 SECTION A - BUDGET SUMMARY
 U.S. DEPARTMENT OF EDUCATION FUNDS

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel						
2. Fringe Benefits						
3. Travel						
4. Equipment						
5. Supplies						
6. Contractual						
7. Construction						
8. Other						
9. Total Direct Costs (lines 1-8)						
10. Indirect Costs						
11. Training Stipends						
12. Total Costs (lines 9-11)						

ED Form No. 524

Name of Institution/Organization		Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.				
SECTION B - BUDGET SUMMARY NON-FEDERAL FUNDS						
Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel						
2. Fringe Benefits						
3. Travel						
4. Equipment						
5. Supplies						
6. Contractual						
7. Construction						
8. Other						
9. Total Direct Costs (lines 1-8)						
10. Indirect Costs						
11. Training Stipends						
12. Total Costs (lines 9-11)						
SECTION C - OTHER BUDGET INFORMATION (see instructions)						

Public reporting burden for this collection of information is estimated to vary from 13 to 22 hours per response, with an average of 17.5 hours per response, including the time reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, Information Management and Compliance Division, Washington, D.C. 20202-4651; and the Office of Management and Budget, Paperwork Reduction Project 1875-0102, Washington DC 20503.

INSTRUCTIONS FOR ED FORM 524

General Instructions

This form is used to apply to individual U.S. Department of Education discretionary grant programs. Unless directed otherwise, provide the same budget information for each year of the multi-year funding request. Pay attention to applicable program specific instructions, if attached.

Section A - Budget Summary U.S. Department of Education Funds

All applicants must complete Section A and provide a breakdown by the applicable budget categories shown in lines 1-11.

Lines 1-11, columns (a)-(e): For each project year for which funding is requested, show the total amount requested for each applicable budget category.

Lines 1-11, column (f): Show the multi-year total for each budget category. If funding is requested for only one project year, leave this column blank.

Line 12, columns (a)-(e): Show the total budget request for each project year for which funding is requested.

Line 12, column (f): Show the total amount requested for all project years. If funding is requested for only one year, leave this space blank.

Section B - Budget Summary Non-Federal Funds

If you are required to provide or volunteer to provide matching funds or other non-Federal resources to the project, these should be shown for each applicable budget category on lines 1-11 of Section B.

Lines 1-11, columns (a)-(e): For each project year for which matching funds or other contributions are provided, show the total contribution for each applicable budget category.

Lines 1-11, column (f): Show the multi-year total for each budget category. If non-Federal contributions are provided for only one year, leave this column blank.

Line 12, columns (a)-(e): Show the total matching or other contribution for each project year.

Line 12, column (f): Show the total amount to be contributed for all years of the multi-year project. If non-Federal contributions are provided for only one year, leave this space blank.

Section C - Other Budget Information Pay attention to applicable program specific instructions, if attached.

1. Provide an itemized budget breakdown, by project year, for each budget category listed in Sections A and B.
2. If applicable to this program, enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period. In addition, enter the estimated amount of the base to which the rate is applied, and the total indirect expense.
3. If applicable to this program, provide the rate and base on which fringe benefits are calculated.
4. Provide other explanations or comments you deem necessary.

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE	
APPLICANT ORGANIZATION		DATE SUBMITTED

**CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND OTHER
RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS**

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 34 CFR Part 82, "New Restrictions on Lobbying," and 34 CFR Part 85, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Education determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 34 CFR Part 82, for persons entering into a grant or cooperative agreement over \$100,000, as defined at 34 CFR Part 82, Sections 82.105 and 82.110, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontracts) and that all subrecipients shall certify and disclose accordingly.

**2. DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS**

As required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR Part 85, for prospective participants in primary covered transactions, as defined at 34 CFR Part 85, Sections 85.105 and 85.110—

A. The applicant certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transaction (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

**3. DRUG-FREE WORKPLACE
(GRANTEES OTHER THAN INDIVIDUALS)**

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610 -

A. The applicant certifies that it will or will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an on-going drug-free awareness program to inform employees about:

(1) The dangers of drug abuse in the workplace;

(2) The grantee's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

(1) Abide by the terms of the statement; and

(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to: Director, Grants Policy and Oversight Staff, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3652, GSA Regional Office Building No. 3), Washington, DC 20202-4248. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Check ☐ if there are workplaces on file that are not identified here.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

NAME OF APPLICANT	PR/AWARD NUMBER AND / OR PROJECT NAME
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
SIGNATURE	DATE

DRUG-FREE WORKPLACE (GRANTEES WHO ARE INDIVIDUALS)

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610-

A. As a condition of the grant, I certify that I will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant; and

B. If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, I will report the conviction, in writing, within 10 calendar days of the conviction, to: Director, Grants Policy and Oversight Staff, Department of Education, 400 Maryland Avenue, S.W. (Room 3652, GSA Regional Office Building No. 3), Washington, DC 20202-4248. Notice shall include the identification number(s) of each affected grant.

**Certification Regarding Debarment, Suspension, Ineligibility and
Voluntary Exclusion — Lower Tier Covered Transactions**

This certification is required by the Department of Education regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, for all lower tier transactions meeting the threshold and tier requirements stated at Section 85.110.

Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion-Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

NAME OF APPLICANT	PR/AWARD NUMBER AND/OR PROJECT NAME
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
SIGNATURE	DATE

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance		2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award		3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____	
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: Congressional District, if known:			5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known:		
6. Federal Department/Agency:			7. Federal Program Name/Description: CFDA Number, if applicable: _____		
8. Federal Action Number, if known:			9. Award Amount, if known: \$ _____		
10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI):			b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.			Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____		
Federal Use Only:			Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)		

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

NOTICE TO ALL APPLICANTS

The purpose of this enclosure is to inform you about a new provision in the Department of Education's General Education Provisions Act (GEPA) that applies to applicants for new grant awards under Department programs. This provision is Section 427 of GEPA, enacted as part of the Improving America's Schools Act of 1994 (Pub. L. 103-382).

To Whom Does This Provision Apply?

Section 427 of GEPA affects applicants for new grant awards under this program. **ALL APPLICANTS FOR NEW AWARDS MUST INCLUDE INFORMATION IN THEIR APPLICATIONS TO ADDRESS THIS NEW PROVISION IN ORDER TO RECEIVE FUNDING UNDER THIS PROGRAM.**

(If this program is a State-formula grant program, a State needs to provide this description only for projects or activities that it carries out with funds reserved for State-level uses. In addition, local school districts or other eligible applicants that apply to the State for funding need to provide this description in their applications to the State for funding. The State would be responsible for ensuring that the school district or other local entity has submitted a sufficient section 427 statement as described below.)

What Does This Provision Require?

Section 427 requires each applicant for funds (other than an individual person) to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted program for students, teachers, and other program beneficiaries with special needs. This provision allows applicants discretion in developing the required description. The statute highlights six types of barriers that can impede equitable access or participation: gender, race, national origin, color, disability, or age. Based on local circumstances, you should determine whether these or other barriers may prevent your students, teachers, etc. from such access or participation in, the Federally-funded project or activity. The description in your application of steps to be taken to overcome these barriers need not be lengthy; you may provide a clear and succinct description of how you plan to address those barriers

that are applicable to your circumstances. In addition, the information may be provided in a single narrative, or, if appropriate, may be discussed in connection with related topics in the application.

Section 427 is not intended to duplicate the requirements of civil rights statutes, but rather to ensure that, in designing their projects, applicants for Federal funds address equity concerns that may affect the ability of certain potential beneficiaries to fully participate in the project and to achieve to high standards. Consistent with program requirements and its approved application, an applicant may use the Federal funds awarded to it to eliminate barriers it identifies.

What are Examples of How an Applicant Might Satisfy the Requirement of This Provision?

The following examples may help illustrate how an applicant may comply with Section 427.

- (1) An applicant that proposes to carry out an adult literacy project serving, among others, adults with limited English proficiency, might describe in its application how it intends to distribute a brochure about the proposed project to such potential participants in their native language.
- (2) An applicant that proposes to develop instructional materials for classroom use might describe how it will make the materials available on audio tape or in braille for students who are blind.
- (3) An applicant that proposes to carry out a model science program for secondary students and is concerned that girls may be less likely than boys to enroll in the course, might indicate how it intends to conduct "outreach" efforts to girls, to encourage their enrollment.

We recognize that many applicants may already be implementing effective steps to ensure equity of access and participation in their grant programs, and we appreciate your cooperation in responding to the requirements of this provision.

Estimated Burden Statement for GEPA Requirements

The time required to complete this information collection is estimated to vary from 1 to 3 hours per response, with an average of 1.5 hours, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to:** U.S. Department of Education, Washington, DC 20202-4651.



Federal Register

**Wednesday,
January 3, 2001**

Part V

Environmental Protection Agency

40 CFR Part 52

**Approval and Promulgation of Air Quality
Implementation Plans; District of
Columbia, Maryland, Virginia; Post 1996
Rate of Progress Plans, One Hour Ozone
Attainment Demonstrations and
Attainment Date Extensions for the
Metropolitan DC Ozone Non-Attainment
Area; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 52**

[DC-2025, MD-3064, VA-5052; FRL-6922-9]

Approval and Promulgation of Air Quality Implementation Plans; District of Columbia, Maryland, Virginia; Post 1996 Rate-of-Progress Plans, One-Hour Ozone Attainment Demonstrations and Attainment Date Extension for the Metropolitan Washington D.C. Ozone Nonattainment Area**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

SUMMARY: The EPA is approving the State Implementation Plans (SIPs) consisting of the Post-1996 rate-of-progress (ROP) plans with transportation control measures and the one-hour ozone attainment demonstrations for the Metropolitan Washington D.C. serious nonattainment area (the Washington area) submitted by the District of Columbia's Department of Health (DoH), Maryland's Department of the Environment (MDE) and by the Virginia Department of Environmental Quality (VADEQ). EPA is also approving the request to extend the attainment date to November 15, 2005. The Clean Air Act (CAA or the Act) requires EPA to establish national air quality standards (NAAQS) for certain widespread pollutants that cause or contribute to air pollution for the purposes of the one-hour ozone NAAQS. The Post-1996 ROP plans and

the one-hour ozone attainment demonstrations will result in significant emission reductions of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) in the Washington area. The intended effect of this action is to approve these SIP revisions as meeting the requirements of the Act.

DATES: This final rule is effective on February 2, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; District of Columbia Department of Public Health, Air Quality Division, 51 N Street, N.E., Washington, DC 20002; Maryland Department of the Environment, 2500 Broening Highway, Baltimore, Maryland, 21224; and the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia, 23219.

FOR FURTHER INFORMATION CONTACT: Christopher Cripps, (215) 814-2179 or Janice Lewis, (215) 814-2185 at the EPA Region III office above or e-mail Cripps.Christopher@epa.gov or Lewis.Janice@epa.gov.

SUPPLEMENTARY INFORMATION:

This **SUPPLEMENTARY INFORMATION** section is organized to address the following questions:

- A. What actions is EPA taking today?
- B. What Previous Action Has Been Taken on These SIP Revisions?
- C. What were the conditions for approval provided in the Notice of Proposed Rulemakings for the Post-1996 ROP

plans and the attainment demonstrations?

- D. What amendments to the attainment demonstration SIP did the Washington, DC area States' make since the December 16, 1999?
- E. What State enforceable commitments were needed for approval?
- F. What was the scope of the July 28, 2000 Supplemental Notice of Proposed Rulemaking?
- G. What was the scope of the October 16, 2000 Supplemental Notice of Availability?
- H. When did EPA make a determination regarding the adequacy of the Motor Vehicle Emissions Budgets for the Metropolitan Washington, DC area?
- I. What SIP elements did EPA need to take final action on before full approval of the attainment demonstration could be granted?
- J. What are the Clean Air Act measures relied on for the post-1996 and attainment demonstration SIP submission?
- K. What are the conformity budgets in the post-1996 ROP plans and the attainment demonstrations?
- L. What happens to the 2005 budgets when States change their budgets using the MOBILE6 Model?
- M. What comments were received on the proposed approvals and how has EPA responded to those?

I. Background**A. What Action Is EPA Taking Today?**

EPA is approving the Post-1996 ROP plans, the one-hour attainment demonstrations and attainment date extension submitted by DoH, MDE and VADEQ for the Washington area. The following tables identify submittal dates and amendment dates for the post-1996 ROP plans and the attainment demonstrations:

TABLE 1.—POST-1996 ROP PLANS

	DC	MD	VA
Initial submittal dates	November 10, 1997	December 24, 1997	December 19, 1997.
Amendment dates	May 25, 1999	May 20, 1999	May 25, 1999.

TABLE 2.—ATTAINMENT DEMONSTRATIONS

	DC	MD	VA
Initial submittal dates	April 24, 1998	April 29, 1998	April 29, 1998.
Amendment dates	October 27, 1998	August 17, 1998	August 18, 1998.
Supplemental dates	February 16, 2000	February 14, 2000	February 9, 2000.
Supplemental dates	March 22, 2000	(MD SIP No. 00-01)	March 31, 2000.
		March 31, 2000	
		(MD SIP No. 00-02)	

TABLE 3.—ATTAINMENT DATE EXTENSION REQUEST

Initial submittal dates	September 20, 1999	July 16, 1999	September 3, 1999.
Supplemental dates	February 16, 2000	February 14, 2000	February 9, 2000.

B. What Previous Action Has Been Taken on These SIP Revisions?

On September 28, 2000, and October 19, 2000, EPA published Notices of Proposed Rulemaking on the Post-1996 plans for the Washington area (65 FR 58243 and 65 FR 62658). On December 16, 1999 (64 FR 70460), we proposed approval of the attainment demonstration and request for an attainment date extension for the Metropolitan Washington, DC area.

On February 22, 2000 (65 FR 8703), EPA published a notice of availability on guidance memoranda relating to the ten one-hour ozone attainment demonstrations (including the Washington area) proposed for approval or conditional approval on December 16, 1999. The guidance memoranda are entitled: "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations" dated November 3, 1999, and "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas" dated November 30, 1999.

On July 28, 2000, EPA published a supplemental notice of proposed rulemaking (SNPR) on the attainment demonstration (65 FR 46383). In that supplemental notice, we clarified and expanded on two issues relating to the motor vehicle emissions budgets in these SIPs. This supplemental notice is discussed in the section entitled "What was the scope of the July 28, 2000 Supplemental Notice of Proposed Rulemaking?" below.

On October 16, 2000 (65 FR 61134), another notice of supplemental proposed rulemaking was published to specifically support the proposed attainment demonstration published on December 16, 1999 for the four serious ozone nonattainment areas (including the Washington area). Originally, EPA established a comment period for this supplemental proposal ending on October 31, 2000. A notice extending the comment period on the October 16, 2000 notice was published on November 2, 2000 (65 FR 65818). An additional notice correcting a typographical error was published on November 9, 2000 (65 FR 67319). This supplemental notice is discussed in the section entitled "What was the scope of the October 16, 2000 Supplemental Notice of Availability?" below.

Comments received on all of the proposed notices listed in this section relevant to the Metropolitan Washington, DC area attainment demonstration, Post-1996 ROP plan and

attainment date extension are discussed in section I. M. below.

C. What Were the Conditions for Approval Provided in the Notice of Proposed Rulemakings for the Post-1996 ROP Plans and the Attainment Demonstrations?

On December 16, 1999 (64 FR 70460), we proposed approval of the attainment demonstration and request for an attainment date extension for the Metropolitan Washington, DC area. Our approval was contingent upon certain actions by Maryland, Virginia and the District of Columbia ("the District").

These actions were:

1. The District, Maryland and Virginia each had to adopt and submit an adequate motor vehicle emissions budget and concurrently submit a list of potential control measures that, when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth. These measures could not involve additional limits on highway construction beyond those that could be imposed under the submitted motor vehicle emissions budget. The states and the District needed to submit the revised budget and list of potential measures in time to allow EPA to determine the budgets adequate by May 31, 2000.

2. The District, Maryland and Virginia each had to adopt and submit an enforceable commitment, or reaffirm an existing enforceable commitment to do the following:

- (a) Submit measures by July 1, 2000 for additional emission reductions, if any, as required to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels.

- (b) Submit a revised SIP and motor vehicle emissions budget by July 1, 2000 if additional measures affect the motor vehicle emissions inventory.

- (c) Submit a revised SIP and motor vehicle emissions budget 1 year after the mobile sources MOBILE6 model is issued (required only if the attainment SIPs include the benefits of EPA's Tier 2/sulfur rule).

- (d) Perform a mid-course review.

3. The District, Maryland and Virginia each had to adopt and submit a rule or rules for additional emission reductions needed, if any, to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels. If any of these adopted measures affected the motor vehicle emissions

budgets, then the District, Maryland and Virginia each needed to adopt and submit a revised SIP that incorporated revised motor vehicle emissions budgets reflecting such measures. These rules and revised motor vehicle emissions budgets, if any, needed to be submitted by July 1, 2000.

D. What Amendments to the Attainment Demonstration SIP did the Washington, D.C., Area States' Make Since December 16, 1999?

The following is a summary of such submittals which include submittal dates of revisions, the content of these submissions and other pertinent facts regarding these submissions:

On February 9, 14 and 16, 2000, Virginia, Maryland and the District, respectively, submitted the "State Implementation Plan (SIP) Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area"—dated February 3, 2000. Hereafter in this notice the phrase "the February 3 plan document" means the document entitled "State Implementation Plan (SIP) Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area" that was dated February 3, 2000. These submittals contain the 2005 motor vehicle emissions budgets that include Tier 2/sulfur benefits, commitments to a mid-course review and a list of potential control measures (from which a set of measures could be selected) that when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the control strategy levels contained in the modeled demonstration of attainment. Also, they contain a demonstration that sufficient additional emission reductions are included to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth.

On March 22 and 31, 2000, the District, Maryland and Virginia submitted the "Proposed Revision to State Implementation Plan (SIP) Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area, establishing the out year Mobile Emissions Budgets for Transportation Conformity"—dated March 22, 2000. (Hereafter in this notice the phrase "the March 22 plan document" means the document entitled "Proposed Revision to State Implementation Plan (SIP) Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area, establishing out year Mobile

Emissions Budgets for Transportation Conformity" that was dated March 22, 2000.) These submittals amended chapters 1 and 9 of the February 3 plan document. These submittals established outyear budgets and submitted an enforceable commitment to revise the SIP and motor vehicle emissions budget 1 year after the MOBILE6 model is issued. In today's action EPA is acting only on the commitment found in section 9.1.1.2 entitled "Commitment to Revise Mobile Emissions Budgets" to revise the motor vehicle emissions budget one-year after the MOBILE6 model is issued. The portions of the March 22 plan document that establish outyear budgets will be the subject of a separate rulemaking action.

E. What State Enforceable Commitments Were Needed for Approval?

Of the four enforceable commitments described in the December 16, 1999, NPR two are now moot: Numbers 2.a and 2.b described in the section entitled "What were the conditions for approval in our December 16, 1999 Notice of Proposed Rulemaking" above. The first is moot because EPA has approved the relevant rules. The Regional Administrator has signed the final action final approving the rules for additional reductions, and these final actions have been or shortly will be published in the **Federal Register**. The second is moot because none of these new measures affect the motor vehicle emissions budgets. Thus the relevant criterion for approving the attainment demonstration SIP is whether or not the States and the District have submitted SIP revisions to fulfill the other relevant conditions for approval set forth in the December 16, 1999 NPR.

Of the two remaining commitments regarding the mid-course review and revision of the motor vehicle emissions budgets using the MOBILE6 model, the States and the District submitted specific enforceable commitments in the February 3 and March 22 plan documents to meet these conditions.

F. What Was the Scope of the July 28, 2000 Supplemental Notice of Proposed Rulemaking?

On July 28, 2000, EPA published a supplemental notice of proposed rulemaking (SNPR) on the attainment demonstration (65 FR 46383). In that supplemental notice, we clarified and expanded on two issues relating to the motor vehicle emissions budgets in these SIPs:

First, we proposed a clarification of what occurs if we finalize conditional or full approval of any of these SIPs based on a State commitment to revise the

SIP's motor vehicle emissions budgets in the future. Under the proposal, the motor vehicle emissions budgets in the approved SIP will apply for transportation conformity purposes only until the budgets are revised consistent with the commitment and we have found the new budgets adequate. Once we have found the newly revised budgets adequate, then they would apply instead of the previous conditionally or fully approved budgets. Normally, revisions to approved budgets cannot be used for conformity purposes until we approve the revised budgets into the SIP. Therefore, we proposed to clarify that when our approval of these 1-hour ozone attainment demonstrations is based on a commitment to future revisions to the budget, our approval of the budget lasts only until revisions to satisfy those conditions are submitted and we find them adequate.

Second, we proposed that States may opt to commit to revise their emissions budgets 1 year after the release of the MOBILE6 model, as originally proposed on December 16, 1999. Or, States may commit to a new option, i.e., to revise their budgets 2 years following the release of the MOBILE6 model, provided that conformity is not determined without adequate MOBILE6-derived SIP budgets during the second year. This proposal did not affect the Metropolitan Washington, DC area because the District, Maryland and Virginia have submitted an enforceable commitment to revise the motor vehicle emissions budgets within one year after the official release of the MOBILE6 model.

In addition, we reopened the comment period to take comment on these two issues and to allow comment on any additional materials that were placed in the dockets for the proposed actions close to or after the initial comment period closed on February 14, 2000 (65 FR at 46383, July 28, 2000). For many of the areas, additional information had been placed in the docket close to or since the initial comment period concluded. In general, these materials were identified as consisting of motor vehicle emissions budgets, and revised or additional commitments or reaffirmations submitted by the States (65 FR at 46387, July 28, 2000).

G. What Was the Scope of the October 16, 2000 Supplemental Notice of Availability?

On October 16, 2000 EPA published a Notice of Availability and reopening of the comment period (65 FR 61134).

This notice was in regards to an analysis to evaluate emission levels of oxides of nitrogen (NO_x) and volatile

organic compounds (VOC) and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional reasonably available control measures (RACM) are available after adoption of Act required measures for the following serious ozone nonattainment areas: Greater Connecticut; Springfield, Massachusetts; Washington, D.C.-Virginia-Maryland; and Atlanta, Georgia. The EPA performed this analysis in response to comments that were submitted on the proposals on these areas' one-hour ozone attainment demonstrations. The EPA took action to propose approval (and disapproval in the alternative) of these areas' State implementation plans (SIPs) on December 16, 1999 (Greater Connecticut (64 FR 70332); Springfield (64 FR 70319); Metropolitan Washington (64 FR 70460); and Atlanta (64 FR 70478)). This information supplemented the December 16, 1999 proposals.

H. When Did EPA Make a Determination Regarding the Adequacy of the Motor Vehicle Emissions Budgets for the Metropolitan Washington, DC Area?

The District, Maryland and Virginia submitted revisions to the attainment plan SIP for the Metropolitan Washington, D.C. area on February 16, 14 and 9, 2000, respectively. These revisions contained revised motor vehicle emissions budgets for the attainment year of 2005 with a list of control measures that, when implemented, would be expected to provide sufficient additional emission reductions to ensure nonattainment area emissions in 2005 are equal to or less than the 1999 control strategy levels contained in the attainment demonstrations considering growth. On January 6, 2000, December 22, 1999, and December 28, 1999, the District, Virginia and Maryland, respectively, reaffirmed their existing enforceable commitments. The lists of measures were identified in Tables 6-1 and 6-2 of the February 3, 2000 plan document.

On March 2, 2000, a notice was posted on EPA's website commencing the comment period on the adequacy of the motor vehicle emissions budgets in these February 2000 SIP revisions for the Washington DC area. That notice also informed the public that the entire revised attainment plan submitted by the District, Maryland and Virginia had been posted by them electronically. EPA's March 2, 1999 website notice also provided a link to and the address for

the website where interested members of the public could access the attainment plan. EPA's adequacy public comment period closed on April 3, 2000. No public comments were received pursuant to EPA's March 2, 2000 posting. We did receive comments on the adequacy of the budgets pursuant to our December 16, 1999 NPR. The comments relevant to the adequacy determination of these budgets were addressed in a response to comments document portion of the technical support document prepared for the adequacy determination. The finding that the budgets of the revised attainment plan are adequate were made in letters, dated May 31, 2000, from EPA Region III to the Maryland Department of the Environment, Virginia Department of Environmental Quality and the District of Columbia Environmental Regulation Administration. In a June 8, 2000, **Federal Register** notice we announced that we had determined the budgets contained in the February 2000 submissions were adequate (65 FR 36439). These findings were effective on June 23, 2000.

These budgets included the benefits of EPA's Tier 2/sulfur rule. The District, Maryland and Virginia have an acceptable commitment to revise the attainment year motor vehicle emissions budgets using the MOBILE6 model one year after the release of the MOBILE6 model.

I. What SIP Elements Did EPA Need To Take Final Action on Before Full Approval of the Attainment Demonstration Could Be Granted?

In the NPR for the Metropolitan Washington, DC attainment demonstration SIP published on December 16, 1999, EPA noted in Tables 3 through 6 the status of many of the control measures or part D requirements of the Act for serious areas. Not all of these were approved on the date of the NPR. The following provides the status of these SIP elements:

On October 29, 1999, EPA approved Maryland's enhanced vehicle inspection and maintenance SIP (64 FR 58340).

On October 27, 1999, EPA approved the District's Non-CTG VOC RACT rule and rules for Stage II, surface cleaning and degreasing and graphic arts rule (64 FR 57777).

On December 28, 1999, EPA approved Maryland's and Virginia's national low emission vehicle (NLEV) SIPs (64 FR 72564).

On July 20, 2000, EPA approved the District's national low emission vehicle (NLEV) SIP (65 FR 44981).

On July 19, 2000, and October 6, 2000, EPA approved Maryland's and Virginia's, respectively, 15% VOC Reduction Plans (65 FR 44686 and 65 FR 59727, respectively).

On November 3, 1999, EPA approved Virginia's surface cleaning and degreasing rules (64 FR 59635).

Elsewhere in today's **Federal Register** EPA is approving Maryland's new source review regulation for the Metropolitan Washington, D.C. area.

EPA is not crediting the Virginia attainment demonstration or Post-1996 ROP plan for measures from VOC sources subject to the Non-CTG RACT or the expanded point source regulations to 25 TPY measure requirements unless source specific limits are approved into the SIP. One of the source specific rules was approved on January 22, 1999 (64 FR 3425) as well as a category specific rule covering lithographic printing operations on March 12, 1997 (62 FR 11334). The Regional Administrator of EPA Region III has signed a final action approving the remaining source specific RACT rules. That action has been or will be published shortly in the **Federal Register**.

Maryland has a state-wide Non-CTG RACT rule which statutorily had to cover 50 TPY sources in the Washington area and which Maryland lowered the applicability of the Non-CTG rule to 25 TPY. Because EPA has not finished action on all the source specific RACT determinations for other parts of the state, EPA has not fully approved the state-wide Non-CTG RACT rule. However, Maryland has submitted RACT regulations for all relevant sources located in the Washington area,

and EPA has determined that Maryland is not taking credit for any RACT reductions from sources or categories of sources in the attainment demonstration or Post-1996 ROP plan for which there is not a SIP-approved RACT rule. These rules had been approved into the SIP prior to December 16, 1999. These rules covered categories such as structural steel coating, explosives and propellant manufacturing, bakeries, and other categories. Further details are documented in the technical support for this final action.

On December 14, 2000, the Regional Administrator signed a final action approving the District's NO_x RACT rule. That action has been or will be published shortly in the **Federal Register**.

On December 15, 2000, the Regional Administrator signed final actions approving Maryland's and Virginia's NO_x RACT rules. The Virginia final approval also included RACT determinations for Non-CTG major VOC sources. These actions have been or will be published shortly in the **Federal Register**.

On December 15, 2000, EPA approved into the SIP the Maryland's NO_x budget rule consistent with the OTC MOU Phase II (65 FR 78416).

On December 14, 2000, the Regional Administrator signed a final action approving the District's beyond RACT rule for large NO_x sources. That action has been or will be published shortly in the **Federal Register**.

On December 14, 2000, EPA approved into the SIP two Virginia permits that impose a 0.15 pounds of NO_x per million BTU heat input on emissions units at two electric generating facilities in the Washington area (65 FR 78100).

On December 14, 2000, the Regional Administrator signed a final action approving the Maryland's NO_x SIP Call state-wide rule. That action has been or will be published shortly in the **Federal Register**.

J. What Are the Clean Air Act Measures Relied on for the Post-1996 and Attainment Demonstration SIP Submission?

TABLE 3.—CONTROL MEASURES IN THE 1-HOUR OZONE POST-1996 ROP AND ATTAINMENT PLANS FOR THE METROPOLITAN WASHINGTON NONATTAINMENT AREA

Control measure	Type of measure	Credited in post-1996 plan	Credited in attainment plan
Enhanced Inspection & Maintenance	Approved SIP	Yes	Yes.
Federal Motor Vehicle Control program	Federal	Tier 1	Tier 1 and 2.
NLEV	Approved SIP opt-in	Yes	Yes ¹ .
Reformulated Gasoline (Phase 1 & 2)	State opt-in	Phase 1	Phase 2.
Transportation Control Measures (TCM)	Approved SIP	Yes	Yes.
Federal Non-road Gasoline Engine standards	Federal	Yes	Yes.

TABLE 3.—CONTROL MEASURES IN THE 1-HOUR OZONE POST-1996 ROP AND ATTAINMENT PLANS FOR THE METROPOLITAN WASHINGTON NONATTAINMENT AREA—Continued

Control measure	Type of measure	Credited in post-1996 plan	Credited in attainment plan
Federal Non-road Heavy Duty diesel engine standards	Federal	Yes	Yes.
Railroad Locomotive Controls	Federal	No	Yes.
NO _x RACT	Approved SIP	Yes	Yes.
Non-CTG RACT to 50 tpy	Approved SIP	Yes	Yes.
VOC Point Source Regulations to 25 tons/year ²	Approved SIP	Yes	Yes.
Stage II Vapor Recovery ³ & On-board Refueling Vapor Recovery (ORVR)	Approved SIP; Federal	Yes	Yes.
AIM Surface Coatings	Federal	Yes	Yes.
Consumer & commercial products	Federal	Yes	Yes.
Autobody refinishing	Federal	Yes	Yes.
Surface Cleaning/Degreasing	Approved SIP	Yes	Yes.
Open Burning Ban ²	Approved SIP	Yes	Yes.
Stage I Vapor Recovery ⁴	Approved SIP	Yes	Yes.
Graphic Arts	Approved SIP	Yes	Yes.
Heavy Duty Diesel Engines (On-road)	Federal	No	Yes.
Beyond RACT NO _x Requirements on Utilities	Approved SIP	No	Yes.

Notes:¹ To the extent NLEV not superseded by Tier 2.² Maryland and Virginia only.³ Reduction credits calculated for Maryland and Virginia only. The District required implementation of Stage II in 1985 for most sources, and claimed no reductions since 1990. (The District's Stage II regulation was amended after 1990 to comply with the requirements for Stage II controls set forth in the 1990 amendments to the Clean Air Act. EPA has approved the District's rule into the SIP.⁴ Reductions only in those additional areas in Maryland and Virginia that were added to the Metropolitan Washington D.C. area after 1990.*K. What Are the Conformity Budgets in the Post-1996 ROP Plans and the Attainment Demonstrations?*

TABLE 4.—TRANSPORTATION CONFORMITY BUDGETS FOR THE WASHINGTON AREA

	VOC (tons/day)	NO _x (tons/day)
Post-1996 ROP Plan ..	128.5	196.4
One-hour Ozone Attainment Demonstration	101.8	161.8

EPA has concluded that the SIP demonstrates attainment with these budgets and contains the measures necessary to support these budgets.

L. What Happens to the 2005 Budgets When States Change Their Budgets Using the MOBILE6 Model?

All States whose attainment demonstration includes the effects of the Tier 2/sulfur program were required to revise and resubmit their motor vehicle emissions budgets after EPA releases the MOBILE6 model. On March 22, 2000, March 31, 2000, and March 31, 2000, the District, Maryland and Virginia, respectively, submitted a commitment to revise the 2005 motor vehicle budgets in the attainment demonstrations within one year of EPA's release of the MOBILE6 model. If the State fails to meet its commitment to submit revised budgets using the MOBILE6 model, EPA could make a finding of failure to implement the SIP,

which would start a sanctions clock under Clean Air Act section 179.

As we proposed on July 28, 2000, the final approval action we are taking today on the 2005 attainment budgets will be effective for conformity purposes only until revised motor vehicle emissions budgets are submitted and we have found them adequate. In other words, the budgets we are approving today as part of the attainment demonstration will apply for conformity purposes only until there are new, adequate budgets consistent with the States' commitments to revise the budgets. The revised budgets will apply for conformity purposes as soon as we find them adequate.

We are limiting the duration of our approval in this manner because we are only approving the attainment demonstrations and their budgets because the States have committed to revise them. Therefore, once we have confirmed that the revised budgets are adequate, they will be more appropriate than the budgets we are approving for conformity purposes now.

If the revised budgets raise issues about the sufficiency of the attainment demonstration, EPA will work with States on a case-by-case basis. If the revised budgets show that motor vehicle emissions are lower than the budgets we are approving today, a reassessment of the attainment demonstration's analysis will be necessary before reallocating the emission reductions or assigning them to the motor vehicle emissions budget as a safety margin. In other words, the area

must assess how its original attainment demonstration is impacted by using the MOBILE6 model vs. the MOBILE5 model before it reallocates any apparent motor vehicle emission reductions resulting from the use of the MOBILE6 model.

M. What Comments Were Received on the Proposed Approvals and How Has EPA Responded to Those?

EPA received comments from the public on the Notice of Proposed Rulemaking (NPR) published on December 16, 1999 (64 FR 70319) for the Washington area's ozone attainment demonstration and Post-1996 ROP plan. Comments were received from the Robert E. Yuhnke on behalf of Environmental Defense and Natural Resources Defense Council; the Midwest Ozone Group; and from the EarthJustice Legal Defense Fund (EarthJustice), on behalf of the following organizations: Virginia Chapter of the Sierra Club, Audubon Naturalist Society, Chesapeake Bay Foundation, Environmental Defense, Coalition for Smarter Growth, Washington Regional Network for Livable Communities, Piedmont Environmental Council, and Southern Environmental Law Center.

EPA also received comments from the public on the supplemental proposed rulemaking published on July 28, 2000 (65 FR 46383), in which EPA clarified and expanded on two issues relating to the motor vehicle emissions budgets in the attainment demonstration SIPs.

Comments were received from Environmental Defense.

EPA received comments from the public on the supplemental proposed rulemaking published on October 16, 2000 (65 FR 61134) to support the proposed attainment demonstration published on December 16, 1999. In that notice, EPA made available an analysis it had performed to evaluate emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. Comments applicable to the Metropolitan Washington, DC area nonattainment area were received from the EarthJustice.

EPA received additional comments on the District's Post-1996 ROP plans for the Metropolitan Washington, D.C. area from the EarthJustice in response to the September 28, 2000 proposal (65 FR 58243) on the Post-1996 ROP plan submitted by the District, and from the EarthJustice, on behalf of the Maryland and Virginia Chapters of the Sierra Club in response to the October 19, 2000 proposal (65 FR 62658) on the Post-1996 ROP plans submitted by Maryland and Virginia.

A summary of the comments received on this action are provided in section II "Response to Comments".

II. Response to Comments

The following discussion summarizes and responds to the comments received on all of the proposed actions summarized in section I.B. above.

A. Attainment Date Extension Policy

In these responses, EPA addresses both the comments received on this rulemaking and those received in Docket A-98-47 on its notice regarding "Extension of Attainment Dates for Downwind Transport Areas" 64 FR 12221 (March 25, 1999), insofar as here relevant. This includes responses to comments filed by EarthJustice and incorporated by reference in later comments filed on proposed EPA actions on the individual areas. General comments on the policy are considered first. Then specific comments as applied to the area are addressed.

1. Comments Received in Response to March 1999 Notice

Comment 1: EPA does not have the legal authority to extend the attainment deadline for serious areas until hoped-for NO_x reductions occur from upwind states in response to the NO_x SIP Call and/or section 126 actions. Such an

extension is not authorized by any provision of the statute. It is not within EPA's discretion to extend the attainment dates for downwind areas classified as moderate or serious. The Act does not authorize EPA to extend attainment deadlines. Congress provided express attainment deadlines in the Clean Air Act, and EPA is without authority to create exemptions from them. Section 181 provides the only exception to the general rule that areas must meet their attainment dates, and is the exclusive remedy. Section 181(a)(5) allows a one-year extension if the state has complied with all requirements and commitments in the applicable SIP and had no more than one exceedance in the attainment year. In section 181(a)(5), Congress provided other authority for extending attainment dates, but not to address effects of transport. See sections 181(a)(5). Section 181(b)(2)(A) requires reclassification for failure to attain by the attainment date. Section 182 requires submissions of attainment plans by the applicable attainment date. EPA's policy violates these express provisions. The statutory deadlines for attainment, the requirement that SIPs adopt measures adequate to provide for attainment by the statutory deadlines, the statutory limitation on EPA's authority to extend attainment dates under section 181(b), and the procedures to be followed in the event an area fails to attain by the deadline are unequivocal and unambiguous, and compliance is required under step one of Chevron. The extension policy is inconsistent with sections 182(b)(1)(A), 182(c)(2)(A) and 172(c)(1), which require each nonattainment area to provide for attainment and submit SIPs providing for attainment by the applicable deadline. There is no exemption from these mandates for downwind areas that can attain through local reductions, but find it difficult to do so. The EPA policy is also inconsistent with the Phoenix reclassification action, which stated that EPA had no flexibility to provide for attainment date extensions in that circumstance. In section 181(i) Congress refused to give EPA authority to extend attainment dates in light of reclassification.

Response 1: The absence of an express provision in the Clean Air Act for an attainment date extension based on transport does not deprive EPA of the authority to interpret the Act to permit such an extension. Nor do the specific attainment date extension provisions in the statute preclude EPA's interpreting the statute to allow for an extension to account for upwind transport that has

interfered with downwind attainment. This interpretation is necessary to prevent the thwarting of Congressional intent not to unfairly burden downwind areas. In various parts of the statute, Congress expressed an intent to accomplish this through provisions prohibiting transport, but these provisions failed to achieve the Congressional goal in time to allow the downwind areas to meet their originally prescribed attainment dates.

The provisions of section 182 governing reclassification also do not prohibit EPA from interpreting the Act to provide for an attainment date extension based on transport. EPA's policy of extending attainment dates for ozone nonattainment areas affected by transport of ozone and ozone precursors represents a reasonable effort to avoid the frustration of Congressional intent to which a literal application of the reclassification provisions would lead. Where a "literal reading of the statute would actually frustrate the congressional intent supporting it, [a court may uphold] an interpretation of the statute more true to Congress's purpose." *EDF v. EPA*, 82 F.3d 451, 468 (D.C. Cir. 1996).

In 1990, Congress established a classification scheme for ozone nonattainment areas that provided for those areas to be classified on the basis of the severity of their ozone problems and for areas with more serious problems to be given more time to attain, but also required to implement more control measures. As part of these provisions, Congress enacted the reclassification provisions under which ozone nonattainment areas that failed to attain the ozone standard as of their attainment dates were to be reclassified to a higher classification, thereby receiving an extension of their attainment date, but also being subjected to additional control requirements. See section 181(b)(2).

On their face, the reclassification provisions do not provide for any exemption from the reclassification process for areas affected by ozone transport from other States. However, EPA believes that, in light of developments since the enactment of the 1990 Clean Air Act Amendments, a literal application of those provisions to such areas would frustrate broader congressional intent. In this context it is important to recognize that, apart from the ozone reclassification provisions, the Act contains a provision—section 110(a)(2)(D)—that obligates upwind states to prohibit pollution—including ozone and its precursors—from sources within the state that contribute significantly to nonattainment and

maintenance problems in downwind states. Congress was cognizant of the need to control such emissions, and of the inequities between upwind and downwind sources that could result if upwind states did not impose emission controls on their sources that contribute to downwind air quality problems. Congress thus sought to establish a regime that would eliminate such inequities.

The legislative history of the 1977 Clean Air Act Amendments regarding the enactment of section 110(a)(2)(E), the predecessor of section 110(a)(2)(D), and section 126 (a provision that allows EPA to directly regulate sources that significantly contribute to nonattainment in another state) clearly demonstrates this. The Senate Committee Report criticized the lack of effective "interstate abatement procedures" and "interstate enforcement actions" under existing law, which the Committee viewed as "resulting in serious inequities among several States, where one State may have more stringent implementation plan requirements than in another State." S.Rep. No. 95-127 at 41, *reprinted in* 3 1977 Legis. Hist. 1416. It is reasonable to assume that Congress, when it enacted the ozone reclassification regime in 1990, would have expected that upwind states would have in place implemented SIP provisions that would eliminate significant contributions, as required by section 110(a)(2)(D), by the time downwind areas were obligated to attain the ozone standard. If that had happened, downwind areas that failed to attain by their attainment dates would have failed to attain as a consequence of their own failures to adopt necessary controls, not as a consequence of the failure of other states to adopt and implement controls necessary to eliminate the contribution of their own sources to the downwind area's nonattainment problem.

Such controls were not in place, however, since, as explained in EPA's transport policy, it in fact took many years for EPA and the States to gain a sufficient understanding of the interstate ozone transport problem to determine the appropriate division of control responsibilities between the upwind and downwind States under the Clean Air Act. It was only through the work of the Ozone Transport Assessment Group (OTAG), which consisted of members from states, industry and environmental groups, and EPA's subsequent NO_x SIP Call, promulgated in October, 1998, that the division of responsibilities among the states was established. Consequently,

the fruits of those efforts—the implementation of the control measures in upwind states that were needed to eliminate the significant contribution of sources in those states—would not ripen until 2003 or 2004, years after the statutory attainment dates for areas such as Springfield, MA. Moreover, because the allocation of responsibility for transport was not made until late 1998, the prohibitions on upwind contributions under section 110(a)(2)(D) and section 126 could not be enforced prior to the attainment dates of areas such as Washington, DC, Greater Connecticut and Springfield, MA. Nor could Congress intend that the upwind areas with later attainment dates accelerate the timetables provided for their own attainment as an indirect means of controlling transported pollution in the absence of data on transport impacts.

To apply the reclassification provision of section 181(b) without taking into account the timing of the identification and implementation of the emission reductions needed to eliminate the significant contribution of the upwind states to the downwind states would lead to the result that the downwind states' sources are required to implement potentially costly control measures to offset the effects of upwind state pollution—pollution that EPA has now determined must be prohibited under the Act and pollution that will soon be eliminated as a result of the NO_x SIP Call and by emissions reductions in upwind states with later attainment dates. Imposing on downwind areas the burden of controlling for pollution attributable to upwind sources would compound the inequities that Congress was seeking to avoid with the enactment of sections 110(a)(2)(D) and 126, thereby frustrating Congressional intent. Moreover, such a result would be at odds with the kind of concerns that led Congress to adopt section 179B for international border areas—concerns that areas not be held accountable for pollution over which they exercise no control.

Section 181(b)(2) provides that EPA should determine whether an area attained the standard "within six months following the applicable attainment date (including any extension thereof)." This reference to extensions in section 181(b)(2) is not limited to extensions granted under section 181(a)(5). Nor does section 181(a)(5) state that Congress intended it to be the only source for an extension.

Moreover, section 181(a)(5) addresses only one specific type of an extension. The fact that Congress provided an extension based on air quality that is

near attainment at the time of its deadline does not imply that Congress precluded the Administrator from conferring extensions based on other considerations—such as the case when air quality is affected by downwind transport. The principle underlying section 181(a)(5)—that areas should not be reclassified if they have done enough to control local air pollution but are still not able to attain—also applies in the case of downwind transport. Section 181(a)(5) shows that Congress was not unalterably opposed to extensions of attainment dates without requiring an area to be subjected to reclassification and the increased control burdens that go with reclassifications. Indeed, section 181(a)(5) indicates that Congress wanted to extend attainment dates without adding control obligations when an area had done what was apparently sufficient to bring it into attainment.

The United States Court of Appeals for the District of Columbia Circuit has previously held that EPA may extend SIP submission deadlines even without explicit statutory authorization. In *Natural Resources Defense Council, Inc. versus EPA*, 22 F.3d 1125, 1135-36, the Court upheld EPA's extension of a statutory deadline for submission of NO_x rules and a NO_x exemption request under section 182(f). Although the Court did not use the theory advanced by EPA, the court did find that the Agency had authority under the CAA to extend the deadline. EPA had found that additional time would be needed for States to conduct photochemical grid modeling in order to document the effects of NO_x reductions on an area. EPA had found that "the time needed to establish and implement a modeling protocol and to interpret the model results will, in a variety of cases, extend beyond the November 15, 1992 deadline for submission of NO_x rules." EPA thus extended the submission deadline, provided the states could show that modeling was not available or did not consider effects of NO_x reductions and that the states submit progress reports on the modeling. The DC Circuit upheld EPA's extension of the deadline and of EPA's time to review the submissions and make an exemption determination. The Court found that "because only a single NO_x RACT submission is required under the statute, it is logical to infer that Congress intended data supporting exemptions to be included in that submittal and that the EPA have the full 14-18 months to review them and to make an exemption determination." Even in the absence of explicit statutory authority, the Court held that "had Congress foreseen the

exemption timing problem, a matter outside the EPA's control, it would have elected to accord the EPA the full statutory review time." 22 F.3d at 1136. The court ruled that "under the circumstances here the NO_x RACT deadlines were properly extended to further the Clean Air Act's purposes." *Id.* At 1137."

Here, similarly, EPA's and the states' inability, until the OTAG and NO_x SIP Call process was completed, to document the impacts of upwind areas on the attainment status of downwind areas, and to assess and allocate responsibilities among the areas, caused a delay in meeting the attainment deadlines. EPA believes that, had Congress foreseen this timing problem, it would have elected to accord the states and EPA more time to meet the attainment deadlines without imposing reclassification requirements on downwind areas. As in the case of the delayed photochemical grid modeling needed for the NO_x submissions at issue in *NRDC versus EPA*, EPA has shown that the ability to document and analyze ozone transport was delayed. And as with the criteria imposed on areas seeking NO_x submission extensions in *NRDC*, EPA has required analogous showings by the states, limiting the extensions to those areas that document a transport problem and that submit attainment demonstrations and adopt local measures to address the pollution that is within local control.

As for Section 182(i), it has no bearing on the authority of the Administrator with respect to the attainment date extensions at issue here. Section 182(i) applies to the authority of the Administrator *after* an area has been reclassified, and relates to the setting of an attainment date for the reclassified area. It does not apply to an area that is not being reclassified, but rather is being granted an extension of its attainment date that effectively defers the applicability of the reclassification provisions. Here, EPA is authorizing an attainment date extension to relieve an area from reclassification requirements, and thus 182(i) does not apply. The section explicitly applies to an area that has already been reclassified, and indicates nothing about the authority of the Administrator to extend an area's attainment date prior to a determination that the area must be reclassified. Nor does section 182(i) indicate Congressional intent to deny EPA authority to interpret the Act consistently with provisions designed to prevent downwind areas from being forced to compensate for upwind pollution.

Comment 2: The Act does not authorize EPA to extend the time for implementation of adopted local control measures. EPA's approach allows downwind areas to defer implementation of local measures until the extended attainment deadline, thereby precluding any determination that the local measures have achieved the degree of emission reduction necessary to provide for attainment when the upwind sources are controlled. EPA unlawfully proposes to allow attainment date extensions for downwind areas to implement local control measures. Under sections 182(b)(1), 182(c)(2)(A), and 172(c)(1), downwind areas must provide for attainment of the NAAQS, and EPA unlawfully seeks to lessen these statutory obligations.

Response 2: As explained in Response 1, above, EPA's attainment date extension policy aims to effectuate, not frustrate the intent of Congress, by providing for an equitable allocation of responsibilities between upwind and downwind areas. Under EPA's interpretation, when an upwind area interferes with a downwind area's ability timely to attain the standard, the downwind area retains the obligation to adopt all applicable local measures, and to implement them as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. Moreover, EPA requires that the area submit an approvable attainment demonstration containing any necessary, adopted local measures and showing that, assuming the appropriate upwind emission reductions, the area will attain the 1-hour standard no later than the final NO_x SIP Call and/or the upwind area's attainment date. Thus both the upwind and downwind areas are held accountable for their respective shares of the emissions reductions required to achieve attainment in the area. EPA views this coordination of the responsibilities of the upwind and downwind areas not as a lessening of the statutory obligations, but as a reconciliation of them with the reality of air transport as we have come to understand it, and with the intent of Congress that areas make expeditious progress towards attainment without sacrificing basic principles of fairness. The attainment date extension policy thus will still lead to attainment as expeditiously as practicable, taking into account the upwind contribution. Indeed, given the impact of upwind areas' contributions and the need for upwind area emissions reductions, requiring local contributions earlier

would not accelerate attainment, considering that EPA is requiring downwind areas to implement local controls as expeditiously as practicable. Moreover, the difficulty of assessing relative contributions and responsibilities of upwind and downwind areas until the completion of the OTAG effort and the NO_x SIP Call lends support to extending attainment deadlines in these circumstances, even without express statutory permission. See *NRDC versus EPA*, discussed supra, in Response to Comment 1.

Comment 3: Reclassification alone has no immediate or mandated regulatory consequence. A SIP revision can consist of a showing that attainment will result from implementation of emission reductions already required pursuant to the SIP Call. EPA's Extension Policy is inconsistent with Clean Air Act sections 179 (c) and (d). This provision does not require additional local control measures beyond those previously approved implemented by the State if adequate control measures have been adopted for upwind areas and are in the process of being implemented.

Response 3: Reclassification does impose regulatory consequences. Section 182(i) requires that "each state containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet the requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified." Thus the area must meet the more stringent requirements of a higher classification, including new source review offsets and changes in cutoffs for permitting. The provisions of section 181(b) apply to reclassification of ozone areas. Sections 179 (c) and (d) do not apply to ozone areas that are classified as marginal, moderate, or serious, which are subject to the requirements of section 181, if EPA determines that they failed to attain the ozone standard as of the applicable attainment date pursuant to that section.

Comment 4: Sections 176 and 184 of the Act do not support EPA's extension policy. Congress left no room in the statute for attainment date extensions for downwind areas, considering instead the additional recommended OTC control measures for upwind areas to be sufficient. Sections 110(a)(2)(D)(i)(1) and 110(a)(2)(A) do not authorize the EPA policy. Section 110(a)(2)(D) imposes a burden only on upwind states and does not relieve downwind states of their obligation to attain by the pre-set attainment dates. EPA lacks the authority to rewrite the extension authority Congress wrote into sections 181 (a)(4) and (b)(3). Congress was well aware of the transport problem

and addressed it in explicit provisions, including section 110(a)(2)(D), section 110(a)(2)(A), section 184, section 176A, section 126, section 182(h), and section 181(a)(4). Thus Congress knew how to address pollutant transport and how to draft an attainment date extension addressed to it when it wished to do so. It also provided for voluntary reclassification under section 181(b)(3) to be available for downwind areas that are affected by transport. Congress dealt with transport explicitly in sections 181(a)(4), 182(h) and 182(j)(2). Congress knew how to exempt transport-affected areas from control requirements if it wanted to, as it did for rural transport areas under section 182(h). Congress limited relief for areas subject to transport to exemption from sanctions, but did not extend this to section 110(c) FIPs. H.R. 101-490, at 248. This shows Congress' intent to apply all of the Act's enforcement tools except for sanctions under section 179. Congress considered the effects of transport, but not in the reclassification context. Congress did provide for attainment date extensions, but not in this context.

Response 4: Having crafted provisions in the 1990 Amendments that it believed would be adequate to address the problem of downwind nonattainment, Congress did not expressly provide for an attainment date extension based on transport. But the absence of such a provision does not prevent EPA from inferring that Congress would have intended to provide such relief should the express provisions fail to function as envisioned. In fact, the manner in which Congress did address the issue of transport shows that EPA's interpretation is consistent with Congress' approach in other sections of the Act. EPA's interpretation resolves the problem that arose when the express statutory tools failed to function as Congress had envisioned. It also, as EPA pointed out in its guidance, 61 FR 14441 (March 25, 1999), provide a means to reconcile the attainment demonstrations and attainment date requirements for downwind areas with the graduated attainment date scheme and schedule for achieving reductions in the upwind areas. Although Congress intended that upwind areas be responsible for preventing interference with downwind areas' attainment dates, it also expressly allotted more time for certain upwind areas to reduce their emissions so as to attain the standard.

Sections 110(a)(2)(D), 126, 184 and 176, provide principles for dealing with transport, most importantly the principle that upwind areas be held accountable for reducing emissions that

interfere with the ability of downwind areas to attain the ozone standard. EPA disagrees with commenters that Congress intended section 110(a)(2)(D) and the other transport provisions to exclude the possibility of relief for downwind areas even if no timely and adequate recourse against transport was in fact available to them. These sections express Congressional intent that downwind states not be saddled with responsibility for pollution beyond their control. Their premise was that there would be a means of redress against upwind states prior to the downwind area's attainment date—a means that also would not be at odds with Congress' decision to provide longer attainment periods for upwind areas confronting onerous pollution problems. But, as EPA pointed out in its guidance, there was in fact no practicable way to carry out the Congressional scheme until a much more comprehensive understanding of the complex facts of ozone transport could be achieved.

Although Congress in the 1990 Amendments and in prior versions of the Clean Air Act attempted to deal with the issue of transport, the reality of the problem proved far more complicated and intractable than expected. As explained in EPA's guidance, 64 FR 14441 (March 25, 1999), it took many years for EPA and the states to study, analyze, and attempt to resolve the allocation of responsibility for transported ozone pollution. EPA's initial efforts included a policy memorandum addressing the issue of overwhelming transport in 1994. The Ozone Transport Assessment Group was launched in 1995. Through this collaborative process, EPA, 37 states and industry and environmental groups tackled the problem of allocating responsibility for transport in its Overwhelming Transport Policy. During the period required for this effort, the resolution of regional transport issues was held in abeyance. It was not until late in 1998 that the conclusion of the OTAG and SIP Call processes resulted in assignments of responsibility that could assist in the design of SIPs and the formation and implementation of attainment demonstrations. 63 FR 57356 (Oct 27, 1998) (NO_x SIP Call Rule). In May 1999, these efforts were reinforced when EPA approved petition submitted under Clean Air Act section 126 by northeast states to mandate federal controls on utilities and other large NO_x emitters in upwind States. 64 FR 28250 (May 27, 1999) (Section 126 Rule). A more detailed description of the history of efforts to address ozone transport through the 1990's may be found in the

preambles to these rulemakings. 63 FR 57360–63, 64 FR 28253–54.

Even after the NO_x SIP Call rulemaking was complete, it was temporarily placed in doubt when the Court stayed the SIP Call rule pending judicial review. The court has ordered NO_x SIP Call SIPs to be submitted by October 30, 2000, and to require sources to implement controls by May 31, 2004.

Thus, although Congress in the Clean Air Act had formulated a prohibition on transport interfering with downwind attainment, it remained largely theoretical until EPA and the states could understand how to identify, quantify, and analyze the transport of emissions, and develop regulatory means to coordinate the respective responsibilities of a multitude of upwind and downwind areas. Although Congress endowed EPA and the states with legal tools to protect downwind areas from interference with attainment, it did not give them the ability to use the tools in the time frame anticipated by Congress. By the time EPA and the states gained an understanding of regional transport sufficient to allow enforcement of the provisions of the Act, it was too late to help some downwind areas meet their attainment dates. Thus it is spurious to argue that EPA and the States could have sought and obtained meaningful relief earlier under section 126 and section 110.

The fact that upwind states are subject to the requirements of section 110(a)(2)(D) but other countries are not provides a possible explanation as to why Congress explicitly provided that ozone nonattainment areas not be reclassified upwards if they would have attained by their attainment dates "but for emissions emanating from outside" the United States (section 179B(b)) but provided no such express exemption from the reclassification provisions in the case of domestic transport. See IV 1990 Legis. Hist. 5741–42 (remarks of Sen. Gramm introducing the international provision and Sen. Baucus supporting it; Senator Gramm stated: "It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over. So what this amendment does it says that in assessing whether or not the State implementation plan has been met, and when assessing the levels of ozone * * * pollution that is being generated across the border has to be taken into account so that our cities and regions will be judged based on what they do. * * * [The State, region and city] will have the opportunity to come to EPA and say that they are in compliance in terms of their emissions, that their failure to meet the overall

standards is due to something that is happening in a sovereign foreign country over which they exercise no control.” Senator Baucus stated that, “It is clear that cities like El Paso in the State of Texas do not have control of their own destiny themselves. Much of the air that affects them is from outside, from another country, over which the Senator said the State of Texas and EPA in this country has virtually no control.”). Congress assumed that EPA would have control over domestic transport under section 110(a)(2)(D), so it saw no need to enact a domestic counterpart to section 179B. As set forth in EPA’s responses and the history of EPA and the states’ efforts to understand and control transport, Congress’ assumptions were not realized.

As set forth in Response 1 above, Congress intended, through enactment of the provisions addressing transport cited by commenters, to prevent downwind areas from being held accountable for pollution over which they exercise no control. Because of the complexity of the transport problem, EPA and the states could not deploy these statutory provisions in time to achieve attainment by their original attainment dates. But this does not mean that Congress would have intended EPA to construe the very provisions designed to protect downwind areas as precluding EPA from interpreting the statute to provide the relief that those provisions failed to furnish. Notwithstanding the absence of an express provision for an attainment date extension based on transport, EPA believes that, taking into account the Act read as a whole, Congressional intent supports EPA’s interpretation of an attainment date extension in the circumstances presented here.

Commenters argue that the fact that Congress formulated various provisions addressing certain specific types of issues concerning transported pollution, but did not provide for an explicit attainment date extension based on transport, should be taken as proof that Congress meant to preclude such relief. But each of the provisions cited by commenters—to sections 181(a)(4), 182(h) and 182(j)(2)—was designed to address a different problem from the one EPA addresses here, and none undermines EPA’s interpretation that Congress intended to provide relief in the situations currently confronted by downwind areas. As shown in EPA’s previous responses, Congress expressed its intent in the transport sections to protect downwind areas from the burdens of transported pollution, but the mechanisms it provided could not be invoked in time.

As for the sections referenced by commenters, Section 181(a)(4) concerns the potential for adjustment of the original classification of an area if its design value is within a certain margin. It allows the Administrator to consider a number of factors, including among them transport. This provision in no way casts doubt on the Congressional intent not to penalize downwind areas through mandatory reclassification should they later fail to attain the standard due to transport. Section 182(h) provides a mechanism for original classifications of rural transport areas as marginal areas, the lowest level of ozone nonattainment areas. Far from indicating that Congress did not intend relief for areas that are victims of transport, this provision reflects Congressional concern with not burdening areas with responsibility for transport not of their making. It sheds no light on whether Congress would have intended EPA to reclassify areas suffering from transported pollution if they were subsequently unable to meet their attainment dates.

Nor, as commenters suggest, would so-called “voluntary” reclassification under section 181(b)(3) furnish an adequate remedy for the situation confronting areas that fail to attain due to interference from transport. An area that felt constrained to seek “voluntary” reclassification would still be forced to subject itself to more stringent requirements to control local pollution in lieu of imposing on upwind areas the responsibility for the transport they caused.

Comment 5: The states had power to timely submit SIPs controlling local pollution to the full extent that it was in the state’s power to require, and combine it with a request to EPA to invoke EPA’s authority to control upwind pollution, and in this way the state could have attained by the applicable deadline. EPA’s 1994 overwhelming transport policy required transport modeling to be documented the same time as the attainment demonstration due in 1994. There is no justification for allowing states to request attainment date extensions based on transport of which they were aware many years ago. An opening is created for upwind states to argue that the NO_x SIP Call effectively accelerates their attainment dates. The OTC was to recommend measures to bring about attainment by the deadlines “in this subpart.”

Response 5: As pointed out in EPA’s Response 4, above, an awareness that transport was occurring is not equivalent to an ability to identify, analyze, and control the emissions that

cause it. This ability, which grew out of years of study and joint effort, did not coalesce until late in 1998. Thus, downwind states were faced with the prospect of having to shoulder responsibility for pollution not of their making—a responsibility that Congress did not intend to impose on them, even as they were aware of an ongoing effort, involving EPA and thirty-seven states, to allocate responsibilities for transport through the OTAG process. As EPA stated in its guidance on the attainment date extension, the state of knowledge about and the ability to document and model transport has advanced considerably since the issuance of EPA’s overwhelming transport guidance. The commenters seek to ignore the climate of uncertainty in which states and EPA were operating with respect to controlling transported pollution. Section 110(a)(2)(D) and 126 are not self-executing, and until the culmination of the OTAG process, downwind areas in the OTAG region could not determine what boundary conditions they should assume in preparing attainment demonstrations and determining the sufficiency of local controls to bring about attainment. Meaningful relief under these provisions simply was not available earlier.

But even with the allocation of responsibilities now available, EPA believes that Congress did not intend to accelerate the obligations of upwind states so that downwind states can meet earlier attainment dates. This would undermine the objective, firmly embodied in the graduated attainment framework of the Clean Air Act, to allow upwind areas with more severe pollution longer attainment deadlines. Upwind areas with later attainment dates still find it difficult to reduce emissions solely to control for transport without accelerating the time frames intended by Congress. It is unrealistic to expect upwind areas to be able to segregate out the reduction of emissions for purposes of transport from the reduction of emissions for purposes of achieving attainment in the upwind area.

The fact, as a commenter points out, that Congress envisioned that the OTC-recommended measures would bring about attainment by the dates “in this subpart” reflects Congress’ over optimistic view that transport would be understood and controlled in time to allow upwind areas to be held accountable for their contributions to downwind nonattainment. The comment underscores that Congress expected upwind reductions to take place by the time the downwind area

was supposed to attain—this confirms that Congress expected that upwind pollution would be controlled prior to downwind attainment deadlines, and that only local pollution would remain as the downwind area's responsibility. But, as we previously stated, the time line for analyzing and assessing transport, and the resulting ability to implement appropriate measures to control upwind pollution, did not keep pace with Congress's expectations. EPA is extending attainment deadlines in order to allow upwind areas to assume responsibility for the pollution they generate and that is transported across State boundaries, and to fulfill the Congressional intent that downwind areas not be saddled with this burden.

Comment 6: EPA's decision directly conflicts with *NRDC v. EPA*, 22 F.3d 1125 (D.C. Cir. 1994), where the Court held that EPA could not extend a clear statutory submission deadline.

Response 6: To the contrary, EPA believes that *NRDC v. EPA* supports EPA's authority to issue the attainment date extensions at issue here. In that case the U.S. Court of Appeals for the DC Circuit upheld EPA's extension of SIP submittal deadlines even though such extensions were not expressly permitted by the Clean Air Act. See the discussion in Response to Comment 1, above. The Court relied in part on the need for additional time to undertake photochemical modeling to document the impact of NO_x reductions on individual areas, an effort that took more time than Congress anticipated. Here, the effort to document, model, and analyze regional ozone transport issues and assess responsibility for relative contributions is, if anything, more complex than the NO_x exemption showings for which the Court upheld deadline extensions in *NRDC v. EPA*. The Court's reasoning in *NRDC v. EPA* should be fully applicable to the policy at stake here.

Comment 7: A commenter concedes that "EPA's delay in establishing the mandatory emission reduction targets for upwind States might justify the delay in adoption of adequate section 110(a)(2)(D) measures by the upwind states," but concludes that the delay "cannot justify delaying the obligation of downwind States to implement all the local measures necessary for attainment by the statutory deadline." One commenter, while acknowledging that it "does not take issue with EPA's objective of accommodating the delayed control contributions from upwind areas," contests EPA's claim of authority to extend attainment dates. This commenter suggests that the appropriate remedy is for EPA to authorize states to

take credit for mandated emission reductions when preparing attainment demonstrations and determining the degree of local controls needed to attain.

Response 7: While the commenter recognizes that there was a delay in understanding and regulating transported pollution that "might justify the delay" in upwind states adopting section 110(a)(2)(D) measures, and agrees with EPA's objective in taking this delay into account, the commenter's proposed solution fails to address the problem it acknowledges. The commenter suggests allowing areas to take credit when they prepare their attainment demonstrations—but this solution addresses only the planning requirement, and does not assist the areas in solving the problem of failing to meet their attainment deadline. It is to address this issue, and to effectuate Congressional intent to avoid penalizing downwind areas in these circumstances, that EPA has formulated the attainment date extension. The delay in ascertaining the amount and achieving the reality of upwind reductions—a delay conceded by commenters—resulted in uncertainty in a downwind area's ability not only to plan for attainment, but to realize it.

This comment also highlights the difficulties that EPA's attainment date extension policy was designed to address: namely that the states and EPA were (1) not able to assess relative contributions until it was too late to implement the controls to bring about attainment; and (2) upwind areas with longer attainment dates should not be required to accelerate their reductions in time to help bring about attainment as scheduled in affected downwind areas with earlier attainment dates. As the policy explains, the determination of relative upwind and downwind contributions and the allocation of responsibility for determining controls did not occur in time for a number of areas to meet their attainment deadlines.

Comment 8: EPA's approach allows emission reductions from motor vehicles to be deferred beyond the deadlines currently required by the Act. The policy allows deferral of conformity budgets beyond the statutory attainment year. It is also inconsistent with statutory requirements for reasonable further progress in section 182(c)(2)(B), for implementation of all reasonably available control measures as expeditiously as practicable in section 172(c)(1), and for requiring that transportation plans and TIPs "will not delay timely attainment of any standard or ... other milestones in any area in section 176(c)(1)."

Response 8: EPA disagrees with the commenter that the policy allows deferral of motor vehicle emission reductions and reasonably available control measures beyond dates contemplated in the Act. The statute requires SIPs to provide for attainment as expeditiously as practicable and for reasonable further progress as necessary to provide for attainment. The motor vehicle and RACM measures the commenter is apparently referring to are not specific measures that the statute requires to be implemented by a fixed date. Rather, they are whatever motor vehicle and RACM measures are necessary to provide for attainment and RFP by the applicable attainment date. Thus, whatever attainment date is applicable, either by virtue of the statute or an attainment date extension, defines the outside date by which motor vehicle and RACM measures necessary to provide for timely attainment must be implemented. A determination must then be made whether any additional measures could advance that date, but the analysis is keyed to the established attainment date. The commenter also complains about delays in establishing budgets for conformity purposes, and requirements that transportation activities not delay timely attainment. Again, these issues are not relevant to establishing an appropriate attainment date. Motor vehicle emission budgets for conformity purposes are those budgets that are established for the attainment year. The Act does not require that these budgets be set for any specific year, but rather contemplates that they will be established for the attainment year. Where EPA has properly determined that an attainment date extension should be granted, conformity budgets are required for the extended attainment year; they are no longer required for the superseded attainment year. The requirement that transportation activities not delay timely attainment is a duty imposed on transportation planning agencies to insure that their activities will not interfere with attainment of the standard by the applicable attainment date. This duty is irrelevant to establishing the appropriate attainment date in the first instance. Once an applicable attainment date is established, transportation planners must insure that their activities will not delay attainment by that date.

Comment 9: A commenter argues that under the terms of section 188(e), an extension of the PM attainment date may not be granted unless the State demonstrates that the area's SIP contains "the most stringent measures that are included in the implementation

plan of any State or are achieved in practice in any State, and can feasibly be implemented in the area.” Moreover, section 188(e) provides for consideration of transboundary emissions from “foreign countries,” not from U.S. sources. EPA’s proposed ozone nonattainment extension policy includes neither of these limitations.

Response 9: The provision cited by commenters applies the PM-10 standard, and is not applicable to attainment dates for ozone. Moreover, the regulatory regimes applicable to ozone and PM-10 are quite different, as are the types of transport issues that arise with respect to these two different pollutants. The issues EPA and the states confront with respect to long-range regional transport of ozone do not apply to PM-10. Beyond that, section 188(e) embodies a standard of “impracticability” as a basis for seeking an extension for a PM-10 attainment deadline. With respect to the ozone attainment deadlines at issue here, EPA is not granting extensions solely on the grounds of impracticability of attaining the standard, but rather, that Congress intended both upwind and downwind areas to have an opportunity to bear the responsibility for their respective contributions to an area’s attainment problems.

Comment 10: EPA’s effort to “manufacture a conflict” between the statutory deadlines and transport provisions fails, since these provisions must be read together so that the upwind area’s “obligation to control pollution affecting the downwind area—be it interstate or intrastate—falls due no later than the downwind area’s attainment date.” EPA’s argument that areas with longer attainment dates be given additional time ignores the statutory requirement that areas attain as expeditiously as practicable, even if that results in attainment before section 181(a)(1)’s outer deadlines. The section 181 attainment deadlines are “outside limits.” A commenter argues that Section 181(a) does not prevent upwind areas from abating pollution in downwind areas in time to meet the downwind area’s attainment date. EPA’s policy cannot be defended as necessary to reconcile 181(a) with the Act’s anti-transport provisions. Upwind areas should be able to control pollution contributing to downwind area’s nonattainment even before reaching their own later-prescribed attainment dates.

A commenter disputes EPA’s interpretation of the language in section 110(a)(2)(D)(1) that SIP provisions prohibiting emissions which cause transport be “consistent with the

provisions of this subchapter.” EPA should interpret the provisions to respect the attainment schedules of sections 181 and 182, and address transport separately. No reference is made to any legislative history that would legitimize EPA’s reading. An upwind area’s obligation to control transported pollution does not depend on its own timetable for attainment. EPA’s policy excuses upwind area’s responsibility from their obligations under sections 110, 176A and 184, exempting them via granting extensions to downwind areas. The policy defers downwind action until the upwind area attains.

EPA improperly assumes that it would not be practicable for upwind sources to reduce emissions contributing to downwind nonattainment prior to the time such reductions would be required to attain in the upwind area. The presumption should be precisely the opposite: unless the upwind state can show that such reductions are impracticable, EPA should assume such reductions can be made at times to eliminate the upwind state’s contribution to nonattainment downwind by the downwind area’s attainment date. EPA’s rule eliminates the Act’s requirement that attainment be accomplished as expeditiously as possible. Section 184 indicates Congressional intent that upwind areas make reductions if necessary to permit downwind areas to attain by their statutory deadlines.

Response 10: EPA disagrees with the commenter’s contention that it has “manufactured a conflict.” Rather, EPA believes that it recognizes and resolves the real tension between the statutory deadlines and the transport provisions. EPA explained this tension in its guidance on the attainment date extension policy. See also EPA’s response to Comment 4. Congress did not intend that areas with more severe pollution problems, and accordingly longer attainment dates, be forced to accelerate reductions on a timetable that otherwise would not be deemed to be required in order to meet their obligation to attain “as expeditiously as practicable.” Commenters want EPA to read the requirement for upwind areas, not as containing the limitation that their attainment deadline be “as expeditiously as practicable”—but instead, to require deadlines that are not practicable solely for the purpose of obtaining downwind reductions.

In dealing with ozone, a regional pollutant, an upwind nonattainment area cannot make reductions for transport purposes without affecting its schedule for making reductions for

attainment purposes. Compelling the upwind area to make drastically faster reductions is akin to asking it to go on a crash diet. But the interplay of the statutory provisions on attainment deadlines and transport reduction indicates that Congress intended upwind areas to reduce transport, but not to the extent of requiring shorter schedules for upwind attainment.

Separating out reductions for purposes of attainment and those for the purposes of transport is more difficult than commenters depict, and EPA believes that Congress did not intend a regimen of drastic reductions without regard to the upwind area’s attainment schedule. In reality, an upwind area that remains in nonattainment may doubtless be shown to continue to transport pollution to an affected downwind area.

Congress provided statutory tools to address the issue of transport (including sections 184, 126, and 110(a)(2)(d)), and believed that they would be used to reach an accommodation among upwind and downwind areas—but as EPA and some commenters have recognized, this accommodation took longer than anticipated. Congress did not, however, intend that upwind areas be forced to apply draconian measures in order to allow the downwind areas to meet their shorter attainment periods.

And although the attainment deadlines can be looked at as “outside limits,” they in fact represent the dates at which statutory consequences must be considered. As long as no earlier date is deemed to be “as expeditiously as practicable,” there is no evidence that Congress considered an earlier date to be acceptable for these areas, regardless of “practicability.” Even if earlier deadlines would be beneficial to downwind areas, Congress did not indicate that this criterion should override the criterion of “practicability” for the upwind area.

In administering the Clean Air Act and the NO_x SIP Call, EPA has interpreted section 110(a)(2)(d)’s significant contribution test as requiring reductions as expeditiously as practicable without requiring upwind areas to impose draconian measures. The United States Court of Appeals for the District of Columbia Circuit recently upheld EPA’s use of a cost component in applying that section’s significant contribution test. *Michigan v. EPA*, 213 F.3d 663, 674–679 (D.C. Cir 2000). EPA decided that the states that were “significant contributors” under section 110(a)(2)(D) need only reduce their emissions by the amount achievable with “highly cost-effective controls.” 63 Fed. Reg. At 57,403. “Thus, once a state

had been nominally marked a "significant contributor," it could satisfy the statute, *i.e.*, reduce its contribution to a point where it would not be 'significant' within the meaning of section 110(a)(2)(D)(i)(I) by cutting back the amount that could be eliminated with 'highly cost-effective controls.' 213 F.3d at 675.

In applying section 110(a)(2)(D), the D.C. Circuit concluded that EPA can consider not only air quality impacts, but also costs of control. Thus EPA has been upheld in interpreting the Act in a way that limits the upwind area's responsibility to control pollution so as to mitigate its responsibility under section 110(a)(2)(D). The upwind area should not have to impose draconian controls. As the Court in *Michigan v. EPA*, 213 F.3d 663, 674–679 (D.C. Cir. 2000) concluded, "there is nothing in the text, structure, or history of section 110(a)(2)(D) that bars EPA from considering cost in its application." 213 F.3d 679. The Court's discussion makes clear that EPA, in interpreting the responsibilities of upwind states under section 110(a)(2)(D), may consider differences in cutback costs in determining what constitutes a significant contribution, and that EPA's inquiry is based on balancing a number of considerations to balance health effects and cost-effectiveness.

EPA's policy does not excuse the upwind areas from fulfilling their obligations under section 110. Upwind areas will be held to section 110 and RACM requirements. EPA has determined the upwind areas' section 110 obligations through the SIP call. The SIP call requires reductions by the date EPA determined was as soon as practicable to eliminate significant contributions to downwind areas.^{1,2} This is coupled with the upwind area's obligation to attain as expeditiously as practicable. It is appropriate to hold downwind areas to the upwind area's attainment date as an outside limit until EPA acts on the upwind area's attainment demonstration. The modeling evidence we have now shows that upwind areas need to come into attainment for the downwind areas of Metropolitan Washington, DC and Greater Connecticut to attain the standard.

Comment 11: The section 182(j)(2) "but for" standard applies to intrastate transport. An area must demonstrate that it would have accomplished attainment but for the failure of other

areas to implement sufficient controls. The policy is vague, and fails to establish clear standards for a showing of transport. The "affected by transport" standard is unclear.

Response 11: EPA is not constrained by the section 182(j)(2) standard. This section is limited in application to single nonattainment areas that are located in more than one state, and does not address transport coming into an area from another, separate area. Our determinations in the SIP call were clear, and the modeling that resulted from the SIP call effort showed that there were significant impacts from upwind areas on the downwind areas, no matter whether one used as a standard the "but for," "significant contribution" or "affected by transport" formulation. Congress intended that an upwind area that significantly contributes to a downwind area's nonattainment problem should bear responsibility for that pollution. The modeling shows that significant contributions are made by the upwind areas to the downwind areas seeking attainment date extensions. EPA still believes that Congress would not have intended to impose the burden on downwind areas for an upwind area's contribution.

Comment 12: Transport is already incorporated into each area's section 181 design value and thus is assumed in setting the projected attainment date. Congress understood transport resulted in elevated design values, but did not authorize classifications to take into account transport, and provided for reclassification by operation of law based on air quality. In section 181(a)(1), Congress directed that ozone nonattainment areas be placed within certain classifications based solely on their design values, regardless of transport. Congress understood that many areas were classified as moderate or severe at least in part because of ozone transport, but did not grant EPA discretion to take such transport into account when establishing initial classifications under the Act. Why does EPA believe so strongly that its approach is consistent with congressional intent, given congress's refusal to consider transport in establishing the initial classifications and in light of sections 181(b)(2) and 182(i)?

Response 12: The fact that the provisions governing the initial classification process expressly take transport into account in a specific way—see section 181(a)(4)—does not mean that EPA is precluded from taking transport into account when providing for an attainment date extension based

on transport, prior to invoking the reclassification provisions. See EPA's Response to Comment 1. By providing for an extension of the attainment date, EPA is effectuating Congressional intent that the transport relief provisions have a chance to take effect before EPA has an obligation to determine whether the area has attained for purposes of triggering the reclassification provisions.

Comment 13: EPA has previously concluded that reclassification is not a means of penalizing an area, but a means of providing additional reductions that will benefit public health. EPA rejected the notion that bump-up is a penalty when it reclassified the Phoenix, Arizona area from moderate to serious. There, EPA said:

The classification structure of the Act is a clear statement of Congress's belief that the later attainment deadlines afforded higher-classified and reclassified areas require compensating increases in the stringency of controls. The reclassification provisions of the Clean Air Act are a reasonable mechanism to assure continued progress toward attainment of the health-based ambient air quality standards when areas miss their attainment deadlines and are not punitive.

Final Rule, 62 Fed. Reg. 60001, 60003 (Nov. 6, 1997). Phoenix NFR. Why has EPA changed its mind about the functions of reclassification?

Response 13: EPA has not changed its mind about the function of the reclassification provision where the issue of transport is not presented. In the context of Phoenix, a reclassification not involving transport, EPA made the response cited by commenter, and noted that the reclassification provision was not intended to be punitive. This view is consistent with the position that EPA takes here, where the circumstances are quite different from the non-transport reclassification context. In the absence of transport, an area that fails to attain by its attainment date, may still fairly be held accountable for controlling local pollution, and be granted a longer attainment deadline in return for more stringent controls. Under these circumstances, applying the reclassification provisions is not punitive. But in the circumstances EPA and the states confront here, the local area is not responsible for pollution that interferes with its ability to meet the standard. In such a case, to trigger reclassification would impose on the area the responsibility and costs for pollution beyond its control, and would indeed be punitive. To avoid such a result, and to effectuate Congressional

^{1,2} Because the D.C. Circuit stayed the obligation of States to submit plans by 13 months, the court also extended by 13 months the date by which sources must implement the necessary controls.

intent, EPA has interpreted the Act to authorize an attainment date extension.

Comment 14: Congress directly considered and rejected EPA's interpretation of its attainment date extension authority during the Clean Air Act Amendments of 1990. During debate, Senator Kasten expressed concern about the proposed legislation's provisions concerning the "issue of downwind ozone nonattainment." He noted that pollution from Chicago affected southeastern Wisconsin, but described "the difficulty this poses is that the Nation's most polluted urban areas are given a much more generous timetable for meeting air-quality standards. Chicago will have 5 more years to meet air-quality standards than these Wisconsin counties will have." Senator Kasten then noted that because of Chicago's longer attainment date, it was likely that the Wisconsin counties "will be found in violation of the Clean Air Act because of actions taking place outside of their jurisdiction in an upwind State." The commenter claims that Senator Kasten introduced an amendment which provided, among other things, for an attainment date extension for the downwind area until the upwind nonattainment area achieved emission reductions. S. Comm. On Env't. And Pub. Works, A Legislative History of the Clean Air Act Amendments of 1990, pp. 4954-55 (1993). The commenter claims that "the amendment, was, of course, rejected." Thus the commenter argues that Congress, although it addressed ozone transport in sections 176A and 184, declined to alter the requirements of section 181, even though it was aware of the problem that EPA seeks to solve with its attainment date extension policy.

Response 14: There is no evidence that the amendment discussed by Senator Kasten was ever debated, considered, or voted upon. Commenter cites no support for the proposition that it was considered and rejected. Thus no inferences can be drawn from the fact that the amendment was not embodied in the statute. Moreover, even if the amendment had been considered and rejected, it differed from and went so far beyond the attainment date extension EPA is applying here as to not be probative of Congressional intent with respect to EPA's current interpretation of the Act. Among other things, it would have provided for a new and separate Ozone Transport Region, and would have provided for different obligations and consequences for downwind areas than what is contained in EPA's current interpretation of the attainment date

extension policy. Legislative History at 4954-56.

Comment 15: The EPA policy is an illegal expansion of the 1994 overwhelming transport policy. Now the upwind area need not be a nonattainment area with a later attainment date, as long as it is an upwind area in another state that significantly contributes to nonattainment in the downwind area. Also, the new policy would allow attainment even later than attainment for the upwind area if the date for the NO_x SIP Call reductions is later. Where the upwind area is in attainment or where its attainment date is earlier than the NO_x SIP Call reductions, then an extension cannot be justified as necessary to reconcile the transport provisions with section 181(a). There is no justification for applying the policy where the upwind area is in attainment, or is in nonattainment but has air quality meeting the NAAQS, or where it is in nonattainment but has an attainment date earlier than the extension proposed.

Response 15: The policy is not an illegal expansion of the overwhelming transport policy, but an appropriate interpretation of the provisions of the Clean Air Act in order to fulfill Congressional intent. EPA's current articulation of the attainment date extension policy reflects the considerable advances in understanding and allocating responsibility for transport that have occurred since the formulation of the Overwhelming Transport Policy. These advances have resulted from the work on ozone transport included in, among other efforts, the OTAG, SIP call, and area modeling programs. EPA thus regards the attainment date extension policy as superseding the Overwhelming Transport Policy. See EPA's earlier responses. The policy is not being applied here so as solely to involve upwind attainment areas, or upwind areas with earlier attainment dates. Upwind attainment areas with deficient SIPs have still been found to contribute significantly to downwind nonattainment. The SIP call involves a statewide area that may include attainment and nonattainment areas that have been found to contribute significantly to downwind nonattainment.

Comment 16: Downwind areas should be required to implement, not just adopt, all required measures before becoming eligible for an extension. Modeling is imprecise and an area might be able to attain if they implement all required measures, which should already have been implemented

prior to the original attainment date. A state could have timely submitted all the provisions for control of local pollution as required by sections 182(b)(1)(A)(i), 182(c)(2), and 172(c)(1) providing for the full extent of local reductions that it was in the state's power to require.

Response 16: In granting an attainment date extension for an area, EPA has determined that upwind reductions are necessary to help the area reach attainment. Thus, requiring all local reductions to be implemented prior to the time that upwind reductions are achieved would not accelerate attainment. Nonetheless, EPA has required that local reductions be implemented as expeditiously as practicable. See EPA's Guidance 61 FR 14441 (March 25, 1999).

Comment 17: EPA's allegation that local measures "will become superfluous once upwind areas reduce their contribution to the pollution problem," 64 Fed. Reg. 14444, is mistaken. First, the measures will produce public health benefits during the period prior to implementation of upwind reductions, and second the Act independently requires all areas to "implement all reasonably available control measures as expeditiously as practicable," 172(c)(1), regardless of what reductions are expected from upwind areas. EPA should not allow downwind areas to postpone implementing local measures until upwind reductions are achieved. This extension is unlawful, and, because unexplained, arbitrary and capricious.

Response 17: EPA disagrees with the commenter's characterization of EPA's actions. EPA is in fact requiring downwind areas to implement the local control measures required under the classification as expeditiously as practicable, but no later than the time the upwind reductions are achieved. See EPA's Guidance, *supra*. To obtain an extension the area must have provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. See also response to Comment 16, above. No measures are being postponed as a result of the areas being granted a later attainment deadlines. None of these areas have delayed or postponed the effectiveness of measures because their attainment date is being extended. The states are enforcing their attainment measures as expeditiously as practicable. Thus EPA's interpretation is not unexplained, arbitrary, nor capricious. As EPA has explained, it seeks to reconcile and coordinate the

responsibilities of upwind and downwind areas to work together to achieve attainment. However, as discussed elsewhere, EPA has applied the section 172(c)(1) RACM requirement to these areas.

Comment 18: EPA is excusing downwind areas from the requirement that nonattainment SIPs must provide for attainment of the NAAQS as provided in sections 182(b)(1)(A)(i), 182(c)(2)(A), 172(c)(1), and is also excusing them from the requirement that they implement all reasonably available control measures as expeditiously as practicable, regardless of the reductions required for attainment. EPA's attempt to lessen these obligations is unlawful and, because unexplained, arbitrary and capricious.

Response 18: EPA is not excusing downwind areas from the requirement that they submit SIPs providing for attainment. Nor is EPA excusing downwind areas from the RACM requirement. EPA's interpretation does not exclude what is necessary for attainment; rather, a measure is RACM if it is needed for attainment. EPA is enforcing this requirement, but allowing the downwind state to take into account the control contribution of upwind areas that Congress envisioned, and that the commenters themselves acknowledge is embodied in Clean Air Act provisions, in determining the applicable attainment date. EPA is also requiring that the states implement reasonable control measures as expeditiously as practicable. See EPA's Responses to other comments.

Comment 19: EPA's policy cannot be defended as a reconciliation of section 181(a) with the Act's anti-transport provisions. Under a proper interpretation of the Act, (1) upwind states' SIPs would ensure that the upwind areas' pollution contributing to NAAQS violations in downwind areas would be controlled, no later than the downwind areas' attainment date, (2) upwind areas would attain locally as expeditiously as practicable but no later than the date prescribed by section 181(a)(1) for the upwind area, and (3) downwind areas would attain locally "as expeditiously as practicable but not later than the applicable date prescribed in section 181(a)(1). This reading gives effect to all of the relevant statutory provisions.

Response 19: The commenter concedes that under a proper interpretation of the Act, upwind states' SIPs would ensure that upwind areas' pollution contributing to violations in downwind areas would be controlled, prior to the downwind area's attainment

date. But in the circumstances actually confronting EPA and the states, as EPA has explained in prior responses, it was not possible, given the state of knowledge of regional ozone transport, to control upwind transport prior to the original downwind attainment dates set forth in section 181(a)(1). Thus, in order to allow the upwind areas to fulfill their responsibility under the Act and to avoid imposing on the downwind area a burden Congress did not intend, EPA proposed interpreting the Act to adjust the downwind attainment deadlines, the very interpretation that the commenter rejects as unnecessary. By adjusting the attainment date to allow the upwind and downwind areas to carry out the statutory allocation of responsibility that is acknowledged by the commenter, EPA indeed is reconciling the Act and rendering a proper interpretation.

Comment 20: No extension should be granted unless the area is as small as possible. The basis for transport should not be OTAG modeling, since better data is available.

Response 20: The boundaries for serious nonattainment areas were established by operation of law (CAA section 107(d)(4)). The modeling done by OTAG and by EPA in the SIP call and the local modeling done in connection with the attainment demonstrations represents the best available modeling.

2. Comments Received on 12/16/99 Proposals

Comment 1: The SIP submittals for Springfield, Greater Connecticut and Metropolitan D.C. do not contain substantive additional measures to reduce the state's ground level ozone problem. EPA cannot approve the attainment submittal because, among other reasons, it does not provide for attainment "as expeditiously as practicable," as required by Section 181(a) of the CAA. Both the attainment submittal and the proposed rule simply assert that the states, acting alone, cannot achieve attainment, either in 1999 or 2007. Neither the state nor EPA explores the question of what can the state do, with the help of specified upwind emission reductions, to achieve attainment as expeditiously as practicable. There is no showing that the State could not achieve attainment in 2003 through a combination of local and state measures and the NO_x SIP Call; we only know that the NO_x SIP Call is not likely to produce attainment by 2003 without additional local reductions. The SIPs do not meet the requirements of the CAA to provide for attainment as expeditiously as practicable and/or no later than

November 15, 1999. States have made no attempt to provide for attainment as soon as possible. Because they do not meet the CAAs requirements for timely attainment, EPA must disapprove them.

Response 1: Congress did not intend for the states to be responsible for achieving attainment, acting alone, when upwind areas are transporting pollution that contributes to their nonattainment problem. EPA has determined that, under the attainment date extension, the states will attain the standard as expeditiously as practicable. The basis for this determination, and EPA's findings that the area is affected by transport from upwind areas, is discussed extensively in section II.A.1. EPA has determined that even with the attainment date extension, no reasonably available control measures would advance the attainment date. See other Responses to Comments in sections II. A and II. E.

Comment 2: The state's SIP does not contain adequate contingency measures as required by Section 172(c)(9) of the CAA. Such measures are especially important in a case such as this, where a substantial portion of the emission reductions relied on are assumed to occur well into the future, and well beyond the statutory attainment date.

Response 2: Although no measures have been specifically designated as contingency measures, EPA has found that measures that could reasonably constitute appropriate contingency measures are already contained in the SIP or exist in promulgated Federal regulations. See discussion of contingency measures in section II. L below.

Comment 3: Even assuming the Transport Guidance is consistent with the Act, the states' attainment submittals do not meet the requirements and/or preconditions necessary to secure adequate emissions reductions from in-state sources. For example, CT and MA could secure further NO_x reductions from power plants and other stationary sources through implementation of RACT on additional stationary sources. The States could secure additional reductions through a diesel inspection and maintenance program.

Response 3: EPA believes that a diesel I/M program may have some potential for emission reductions. At this time, however, there is insufficient information available about the program to determine whether I/M would be economically or technologically feasible. Also, the test protocols are not sufficiently developed to enable EPA to determine the magnitude of reductions possible, and thus whether the

program's emission reductions would advance the attainment date. In its other Responses to Comments, EPA has explained and supported its conclusions that the states have adopted and will implement as expeditiously as practicable the measures necessary to secure adequate emissions reductions from in-state sources. No additional RACM is required for these areas.

Comment 4: The States have failed to timely pursue administrative avenues for states to seek redress for transport problems: through a section 126 petition and a section 110 SIP call. CT and MA did not file section 126 petitions until the summer of 1997. Even if EPA's transport Guidance were lawful, it should not be applied except as a matter of last resort—the downwind area must have identified and committed to all necessary local measures and exhausted its administrative remedies in a timely fashion to secure all necessary upwind reductions. The States have failed to do that and have waited too long. They want to wait until upwind reductions bring them into attainment without making any additional emission reductions of their own. This is not in keeping with the attainment provisions and schedules in the CAA.

Response 4: EPA disagrees with the commenter that the States have waited too long to seek relief. As set forth in detail in section II. A.1, the States and EPA have worked for years to solve the transport problem, and were unable to obtain adequate redress for transported pollution until the culmination of the OTAG effort. EPA finds that the States were not dilatory in their efforts to pursue relief from transported pollution; relief was not available until regional transport could be analyzed and responsibility for remediation appropriately apportioned. These effort took years, and was more prolonged than Congress, EPA, or the states had anticipated. See EPA's discussion of the history of the efforts to address transport in section II. A.1. The States have not failed to pursue any remedies as they became meaningful and available. Nor does EPA agree that its attainment date extension allows the States to wait for upwind reductions without making local emission reductions. EPA's policy is predicated upon an equitable allocation of responsibility between upwind and downwind areas, and explicitly requires the downwind areas to adopt and implement local controls as expeditiously as practicable.

Comment 5: The states have failed to implement all available control measures and have not demonstrated that attainment is impracticable due to pollutant transport. The states have

failed to meet the requirement of EPA's transport policy that the states adopt all local measures required under the area's current classification. Among other things, the Washington, DC area states have failed to adopt NO_x RACT programs that meet all applicable requirements of the Act and EPA guidance.

Response 5: EPA disagrees with the commenter's contention that the states being granted attainment date extensions have not satisfied the criterion of adopting required local measures. EPA finds that the states have fulfilled their responsibility with respect to having adopted required local measures. With respect to contingency measures, EPA has determined that measures that can be reasonably construed to function as contingency measures are already contained in the areas' SIPs. See further discussion of the contingency measure requirement in other Responses to Comments. With respect to Washington, DC and Massachusetts, the areas have adopted and EPA has found approvable all other local measures that are required under their current classification, including NO_x RACT. EPA has further found that the states have or will implement required local measures as expeditiously as practicable. With respect to Connecticut, the state has adopted and EPA has approved all measures required under its current classification except with respect to certain aspects of its new source review (NSR) program. Connecticut's nonattainment area NSR program is the one Clean Air Act measure required under the state's classification that EPA has not yet approved as meeting all the requirements of the Act. Nevertheless, EPA has determined that Connecticut's NSR program substantially addresses the Act's requirements and provides a sufficient basis for EPA to apply its attainment date extension policy. The Connecticut NSR program imposes all the Act's requirements on new and modified sources of air pollution for those sources covered by the state's program, including the lowest achievable emissions rate technology standard and emissions offsets consistent with the classification under the Act of the state's two ozone nonattainment areas. In addition, the state's NSR program captures the correct universe of new sources covered by the Act's requirements. The reason Connecticut's program does fully meet all the Act's requirements is that the state's formula for capturing modified sources of air pollution in the program differs from the federal requirements in

one respect. EPA's federal NSR regulations generally require that modifications be measured by comparing the actual emissions of the existing facility with the potential emissions of the modified facility. Connecticut's regulations compare the potential emissions of the existing facility with the potential emissions of the modified facility. On the other hand, Connecticut's program is more rigorous than EPA's regulations in measuring a modification in so far as the state's program does not allow for "netting" at a source to avoid being treated as a modification. Federal regulations would allow an increase in emissions at an existing source to be balanced against contemporaneous emissions decreases elsewhere at the source to avoid NSR, while Connecticut's NSR program does not. On balance, EPA has concluded that the state's NSR program substantially addresses this Clean Air Act requirement for the purposes of granting an attainment date extension under EPA's policy.

EPA thus concludes that substantial compliance with the NSR program and approval of all remaining required measures constitutes substantial compliance with the criterion that the state adopt all measures required under Connecticut's current classification. EPA has further found that it will implement these measures as expeditiously as practicable. Thus, EPA believes that the states have fulfilled their responsibility to satisfy the requirements of their current classification, and that, under these circumstances, Congress would not have intended them to be reclassified for failure to attain.

The sufficiency of the Washington, DC area States' NO_x RACT rules is discussed extensively in responses to other comments elsewhere in this notice.

Comment 6: The states have not shown that they have committed to implement all local measures necessary to secure adequate emissions reductions from in-state sources. They have not shown that a combination of local reductions and upwind reductions will achieve attainment by their extended dates.

Response 6: EPA has found that the states have demonstrated attainment through a combination of upwind and local measures. See other EPA responses and discussion of the attainment demonstration. Secondly, although the states theoretically could always secure more reductions through additional local measures, Congress did not intend that the downwind states compensate for the upwind states failure to control

transported pollution. Having met the RACM requirements and controlled for local pollutants, the downwind area should not be required to secure additional emissions reductions in order to offset emissions from upwind sources. As EPA has discussed elsewhere in its responses, the States have committed to implement all measures necessary to secure adequate emissions from in-state sources.

Comment 7: The DC Circuit stated in *American Trucking Ass'n v EPA*, 175 F.3d 1027 (D.C. Cir. 1999) that EPA "is precluded from enforcing a revised primary ozone NAAQS other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2." This means that EPA cannot ignore the attainment dates in Subpart 2.

Response 7: The opinion cited concerns EPA's authority to implement a revised 0.08 ppm 8-hour standard not the standard at issue here—the one-hour 0.12 ppm NAAQS. Regarding EPA's belief that the provisions in Subpart 2 of the Act govern implementation of the one-hour standard, EPA is not ignoring the attainment dates in Subpart 2. EPA is interpreting the provisions of Subpart 2 to allow EPA to extend the attainment deadlines in accordance with Congressional intent and using means set forth in the provisions of Subpart 2. Thus EPA is properly implementing the one-hour standard.

Comment 8: Each serious area plan on its face shows that the control measures described therein will not by themselves produce attainment at any point, and clearly not by 1999. EPA's reliance on SIP call reductions is particularly unjustified in the DC Area, given that Virginia is challenging EPA's authority to require those very reductions. EPA cannot grant credit for SIP call reductions when the SIP call has been judicially stayed.

Response 8: As EPA has explained elsewhere in its responses, Congress did not intend for a downwind area that is affected by transport to be responsible for pollution generated outside its borders. The stay of the SIP call has been vacated and the SIP call has been upheld. The court lifted its stay and states are required to submit SIPs fully addressing the SIP call and if they fail, EPA must promulgate a Federal plan. EPA is fully justified in its reliance on SIP call reductions and in granting credit for them in the areas' attainment demonstrations.

Comment 9: The SIPs fail to provide for attainment as expeditiously as practicable even though this is a serious area where a specific attainment deadline has passed. Furthermore, the

States have not even evaluated the possibility of attaining sooner than their extended attainment dates. The SIPs must be disapproved by EPA since they do not meet the CAA's basic requirements for timely attainment nor do they consider the possibility of providing for earlier attainment even if the attainment date extension were permissible.

Response 9: EPA shows in its other Responses, the SIPs provide for attainment as expeditiously as practicable, and the States have shown that they qualify for an attainment date extension due to transport. EPA evaluated the reductions required for attainment from both the upwind and downwind areas, and determined that the attainment dates were as expeditious as practicable. See also Responses 11 and 12 below.

Comment 10: This not a situation where the states have adopted all available measures and still show nonattainment due solely to transport. The states have refused to even identify the levels of VOC and NO_x emissions that would be consistent with attainment in the absence of NO_x reductions that would be required by the NO_x SIP Call. Nor do the plans state the level of emission reductions that would be needed to produce attainment in the absence of upwind reductions. EPA cannot rationally find that transported NO_x renders attainment impracticable in the serious areas, when the states have neither quantified the reductions needed locally to attain in the absence of transport reductions, nor shown that such reductions are unachievable through adoption of additional state and local control measures.

Response 10: EPA in its Responses has provided an extensive analysis of the role of transport in downwind nonattainment for the serious areas. In the NO_x SIP Call, EPA concluded that "EPA believes that available modeling analyses demonstrate that upwind reductions are necessary to help downwind areas come into attainment." 63 FR 57404 (October 27, 1998). These downwind areas included the areas being granted attainment date extensions here. The DC Circuit upheld EPA's conclusion in *Michigan versus EPA*, 213 F.3d 663 (D.C. Cir. 2000). The SIP call and the modeling done by the states support the conclusion that the affected areas cannot attain without upwind reductions. Congress intended that upwind areas be responsible for pollution that interferes with downwind nonattainment, while at the same time requiring that downwind areas be accountable for locally generated

emissions. The Clean Air Act reflects Congressional intent that downwind areas not be compelled to compensate for lack of upwind controls through the adoption of additional state and local control measures, as commenter suggests. EPA disagrees with commenter's suggestion that the downwind areas must show that no further local reductions are achievable before relying on upwind areas to shoulder responsibility for the pollution they generate. EPA finds that a reading of the Clean Air Act shows that Congress did not intend for downwind areas to be forced to impose additional local controls to offset significant pollution contributions from upwind areas, before seeking relief.

Comment 11: EPA has not demonstrated that Metropolitan Washington, DC would attain but for transport. To the contrary, episode-specific data shows that the second highest ozone exceedance recorded last summer occurred on a day on which air parcels originated in Northern Virginia. The EPA has offered no rational basis for granting a longer transport-related extension to the Metropolitan Washington, DC area than to Massachusetts.

Response 11: Strong evidence indicates that the Washington, DC nonattainment area is impacted by transport from outside the area and cannot attain without upwind reductions. Sensitivity modeling which applies additional local controls to the Baltimore nonattainment area indicates reducing levels of ozone and its precursors in the Baltimore nonattainment area reduces ozone levels in the Washington, DC nonattainment area. A more focused analysis of days when exceedances occur in the Washington, DC nonattainment area shows that under stagnant meteorological conditions the Washington, DC and Baltimore areas ultimately share the same air mass and mixing occurs throughout the CMSA as is evidenced by the strong correlation between high ozone concentrations in each of these areas (less than 40 miles apart) during stagnation events. Because air can be transported from Baltimore to Washington, DC within 24 hours and a portion of the DC exceedances occur on days when winds are from the north, including Baltimore, high ozone in Baltimore has the potential to cause exceedances in Washington, DC.

NO_x SIP Call and local attainment modeling for the Washington, DC and Baltimore nonattainment areas show that the Washington, DC nonattainment area will need controls not only local to the Washington, DC nonattainment area

but from upwind areas, especially Baltimore, MD. Local modeling for 1999 relies heavily on the NO_x SIP Call reductions and the local controls in the Baltimore area, some of which will not be implemented until 2005 (*i.e.*, 2005 boundary conditions were used that reflect the NO_x SIP Call reductions in addition to the Baltimore area SIP controls). It has been clearly demonstrated that, until the Baltimore area implements local controls and comes into attainment, high ozone and precursor emissions from the Baltimore nonattainment area have the potential to cause exceedances in the Washington, DC nonattainment area.

Comment 12: EPA has not shown that the attainment date extension for Connecticut is justified due to transport.

Response 12: There is strong evidence to support the premise that the Greater Connecticut nonattainment area is impacted by transport from outside the state, especially New York; and cannot attain without upwind reductions. Sensitivity modeling which removes all emissions from Connecticut indicate transported levels of ozone and its precursors alone generate exceedances in the state of Connecticut. A more focused analysis of days when exceedances occur in Connecticut shows that the majority of these days occur when winds are coming from the Southwest and thus carry NO_x and ozone from the New York City metropolitan area and points further west and south. NO_x SIP Call and local attainment modeling for the New York and Greater Connecticut nonattainment areas show that the Greater Connecticut nonattainment area will need controls not only local to the Greater Connecticut nonattainment area but from upwind States, especially New York. Local modeling for 2007 relies heavily on the NO_x SIP Call reductions (upwind and within the modeling domain) as well as controls being implemented in the New York nonattainment area. It has been clearly demonstrated that, until the New York nonattainment area implements local controls and comes into attainment, high ozone and precursor emissions from the New York nonattainment area have the potential to cause exceedances in the Greater Connecticut nonattainment area.

Comment 13: The Plan fails to demonstrate emission reductions of 3 percent per year over each three year period after 1999 until attainment. Assuming a 2005 attainment date, the plan must provide for a nine percent reduction in VOC and/or NO_x remissions by 2002 and another 9 percent between 2002 and 2005. The states have not attempted to

demonstrate compliance with these requirements, and EPA has not proposed to find that they have been met. EPA has no authority to waive the statutory mandate for three per cent annual reductions. Emission reductions in upwind states do not waive the statutory requirement for 3 percent annual emission reductions within the downwind nonattainment area.

Response 13: EPA's guidance did not interpret the period of time after granting the attainment date extension based on transport as requiring additional rate of progress increments from the downwind area, since we determined that the reason the area had not attained was due to upwind transport. Therefore it would be unreasonable to lock the downwind area into fixed progress requirement reductions from local sources, when the combination of local reductions with upwind area source emission reductions is what will bring the area into attainment. In any event, to the extent that it should be determined otherwise, and that any ROP required should be imposed on the downwind area, this requirement would not attach until EPA grants the attainment date extension and provides the area with a later attainment date. Since the requirement was not previously due, fulfilling the requirement, if any is deemed to exist, is not a condition of receiving the attainment date extension.

Comment 14: EPA has no legal authority to extend the one-hour attainment date. Such extension is unlawful and unwise. Under the explicit provisions of Section 181(a)(1) of the Act, the states are required to attain the one-hour ozone standard as expeditiously as practicable, but no later than November 15, 1999. EPA cannot create exemptions from this requirement.

Response 14: EPA has responded extensively to issues pertaining to the legality of the attainment date extension in its March 1999 responses, above.

B. Attainment Demonstrations—Weight of Evidence

Comment: The weight of evidence approach does not demonstrate attainment or meet CAA requirements for a modeled attainment demonstration. Commenters added several criticisms of various technical aspects of the weight of evidence approach, including certain specific applications of the approach to particular attainment demonstrations. These comments are discussed in the following response.

Response: Under section 182(c)(2) and (d) of the CAA, serious and severe ozone

nonattainment areas were required to submit by November 15, 1994, demonstrations of how they would attain the 1-hour standard. Section 182(c)(2)(A) provides that "[t]his attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective." As described in more detail below, the EPA allows states to supplement their photochemical modeling results, with additional evidence designed to account for uncertainties in the photochemical modeling, to demonstrate attainment. This approach is consistent with the requirement of section 182(c)(2)(A) that the attainment demonstration "be based on photochemical grid modeling," because the modeling results constitute the principal component of EPA's analysis, with supplemental information designed to account for uncertainties in the model. This interpretation and application of the photochemical modeling requirement of section 182(c)(2)(A) finds further justification in the broad deference Congress granted EPA to develop appropriate methods for determining attainment, as indicated in the last phrase of section 182(c)(2)(A).

The flexibility granted to EPA under section 182(c)(2)(A) is reflected in the regulations EPA promulgated for modeled attainment demonstrations. These regulations provide, "The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in [40 CFR part 51 Appendix W] (Guideline on Air Quality Models)." ³ 40 CFR 51.112(a)(1). However, the regulations further provide, "Where an air quality model specified in appendix W * * * is inappropriate, the model may be modified or another model substituted [with approval by EPA, and after] notice and opportunity for public comment * * *." Appendix W, in turn, provides that, "The Urban Airshed Model (UAM) is recommended for photochemical or reactive pollutant modeling applications involving entire urban areas," but further refers to EPA's modeling guidance for data requirements and procedures for operating the model. 40 CFR 51 App. W section 6.2.1.a. The modeling guidance discusses the data requirements and operating procedures, as well as interpretation of model

³ The August 12, 1996 version of "Appendix W to Part 51—Guideline on Air Quality Models" was the rule in effect for these attainment demonstrations. EPA is proposing updates to this rule which will not be in effect until the new rule is promulgated.

results as they relate to the attainment demonstration. This provision references guidance published in 1991, but EPA envisioned the guidance would change as we gained experience with model applications, which is why the guidance is referenced, but does not appear, in Appendix W. With updates in 1996 and 1999, the evolution of EPA's guidance has led us to use both the photochemical grid model, and additional analytical methods approved by EPA.

The modeled attainment test compares model predicted 1-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. The results may be interpreted through either of two modeled attainment or exceedance tests: a deterministic test or a statistical test. Under the deterministic test, a predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to not exceed the standard. Under the statistical test, attainment is demonstrated when all predicted (*i.e.*, modeled) 1-hour ozone concentrations inside the modeling domain are at, or below, an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episode modeled).⁴

In 1996, EPA issued guidance;⁵ to update the 1991 guidance referenced in 40 CFR 50 App. W, to make the modeled attainment test more closely reflect the form of the NAAQS (*i.e.*, the statistical test described above), to consider the area's ozone design value and the meteorological conditions accompanying observed exceedances, and to allow consideration of other evidence to address uncertainties in the modeling databases and application. When the modeling does not conclusively demonstrate attainment, EPA has concluded that additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The inherent imprecision of the model means that it may be inappropriate to view the specific numerical result of the model as the only determinant of whether the SIP controls are likely to lead to attainment. The EPA's guidance recognizes these limitations, and provides a means for

considering other evidence to help assess whether attainment of the NAAQS is likely to be achieved. The process by which this is done is called a weight of evidence (WOE) determination. Under a WOE determination, the state can rely on, and EPA will consider in addition to the results of the modeled attainment test, other factors such as other modeled output (*e.g.*, changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances, and predicted change in the ozone design value); actual observed air quality trends (*i.e.*, analyses of monitored air quality data); estimated emissions trends; and the responsiveness of the model predictions to further controls.

In 1999, EPA issued additional guidance⁶ that makes further use of model results for base case and future emission estimates to predict a future design value. This guidance describes the use of an additional component of the WOE determination, which requires, under certain circumstances, additional emission reductions that are or will be approved into the SIP, but that were not included in the modeling analysis, that will further reduce the modeled design value. An area is considered to monitor attainment if each monitor site has air quality observed ozone design values (4th highest daily maximum ozone using the three most recent consecutive years of data) at or below the level of the standard. Therefore, it is appropriate for EPA, when making a determination that a control strategy will provide for attainment, to determine whether or not the model predicted future design value is expected to be at or below the level of the standard. Since the form of the 1-hour NAAQS allows exceedances, it did not seem appropriate for EPA to require the test for attainment to be "no exceedances" in the future model predictions. The method outlined in EPA's 1999 guidance uses the highest measured design value from all sites in the nonattainment area for each of three years.⁷ The three year "design value"

represents the air quality observed during the time period used to predict ozone for the base emissions. This is appropriate because the model is predicting the change in ozone from the base period to the future attainment date. The three yearly design values (highest across the area) are averaged to account for annual fluctuations in meteorology. The result is an estimate of an area's base year design value. The base year design value is multiplied by a ratio of the peak model predicted ozone concentrations in the attainment year (*i.e.*, average of daily maximum concentrations from all days modeled) to the peak model predicted ozone concentrations in the base year (*i.e.*, average of daily maximum concentrations from all days modeled). The result is an attainment year design value based on the relative change in peak model predicted ozone concentrations from the base year to the attainment year. Modeling results also show that emission control strategies designed to reduce areas of peak ozone concentrations generally result in similar ozone reductions in all core areas of the modeling domain, thereby providing some assurance of attainment at all monitors.

In the event that the attainment year design value is above the standard, the 1999 guidance provides a method for identifying additional emission reductions, not modeled, which at a minimum provide an estimated attainment year design value at the level of the standard. This step uses a locally derived factor which assumes a linear relationship between ozone and the precursors. Although a commenter criticized this technique for estimating ambient improvement because it does not incorporate complete modeling of the additional emissions reductions, the regulations do not mandate nor does EPA guidance suggest that States must model all control measures being implemented. Moreover, a component of this technique—the estimation of future design value, should be considered a model predicted estimate. Therefore, results from this technique are an extension of "photochemical grid" modeling and are consistent with Section 182(c)(2)(A). Also, a commenter believes EPA has not provided sufficient opportunity to evaluate the calculations

this averaging only for purposes of determining one component, *i.e.*—the amount of additional emission reductions not modeled—of the WOE determination. The WOE determination, in turn, is intended to be a qualitative assessment of whether additional factors (including the additional emissions reductions not modeled), taken as a whole, indicate that the area is more likely than not to attain.

⁴ Guidance on the Use Of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA-454/B-95-007, June 1996.

⁵ Ibid.

⁶ "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: <http://www.epa.gov/ttn/scram>.

⁷ A commenter criticized the 1999 guidance as flawed on grounds that it allows the averaging of the three highest air quality sites across a region, whereas EPA's 1991 and 1996 modeling guidance requires that attainment be demonstrated at each site. This has the effect of allowing lower air quality concentrations to be averaged against higher concentrations thus reducing the total emission reduction needed to attain at the higher site. The commenter's concern is misplaced. EPA relies on

used to estimate additional emission reductions. EPA provided a full 60-day period for comment on all aspects of the proposed rule. EPA has received several comments on the technical aspects of the approach and the results of its application, as discussed above and in the responses to the individual SIP's.

Commenter states, application of the method of attainment analysis in the December 16, 1999 guidance will yield a lower control estimate than if we relied entirely on reducing maximum predictions in every grid cell to less than or equal to 124 ppb on every modeled day. However, this approach may overestimate needed controls (*e.g.*, the form of the standard allows up to 3 exceedances in 3 years in every grid cell; and if the model over predicts observed concentrations, predicted controls may also be overestimated, *etc.*). In recognition of this EPA has considered other evidence to make these determinations, as described above through the weight of evidence determination.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the WOE determination, EPA has made these determinations based on all of the information presented by the States and available to EPA. The information considered includes model results for the majority of the control measures. Though all measures were not modeled, EPA reviewed the model's response to changes in emissions as well as observed air quality changes to evaluate the impact of a few additional measures, not modeled. EPA's decision was further strengthened by each State's commitment to check progress towards attainment in 2003 and to adopt additional measures, if the anticipated progress is not being made.

A commenter further criticized EPA's technique for estimating the ambient impact of additional emissions reductions not modeled on grounds that EPA employed a rollback modeling technique that, according to the commenter, is precluded under EPA regulations. The commenter explained that 40 CFR 51 App. W section 6.2.1.e. provides, "Proportional (rollback/forward) modeling is not an acceptable procedure for evaluating ozone control strategies." Section 14.0 of appendix W defines "rollback" as "a simple model that assumes that if emissions from each source affecting a given receptor are decreased by the same percentage, ambient air quality concentrations decrease proportionately." Under this approach if 20% improvement in ozone is needed for the area to reach

attainment, it is assumed a 20% reduction in VOC would be required. There was no approach for identifying NO_x reductions. The "proportional rollback" approach is a purely empirically/mathematically derived relationship, and is not what EPA did. The prohibition in Appendix W applies to the use of a rollback method which is empirically/mathematically derived and independent of model estimates or observed air quality and emissions changes as the sole method for evaluating control strategies. For the demonstrations under proposal, EPA used a locally derived (as determined by the model and/or observed changes in air quality) ratio of change in emissions to change in ozone to estimate additional emission reductions to achieve an additional increment of ambient improvement in ozone. This did assume a linear relationship between the precursors and ozone for a small amount of ozone improvement. EPA has generally relied on photochemical modeling to evaluate the attainment demonstrations and their control strategies, and has used locally derived adjustment factors as a component to estimate the extent to which additional emissions reductions—not the core control strategies—would reduce ozone levels and thereby strengthen the weight of evidence test. This limited use of adjustment factors is more technically sound than the unacceptable use of proportional rollback. The limited use of adjustment factors is more practical in light of the uncertainty in the modeling; the resources and time required to perform additional modeling; and the requirement that areas perform a progress check by the end of 2003.

Contrary to concerns expressed by a commenter, EPA did not err by modifying the modeling requirements without first proposing to do so. Section 3.0 of appendix W states, "It should not be construed that the preferred models identified here are the only models available for relating emissions to air quality." Section 3.2.2 of Appendix W further provides that the "determination of acceptability of a model is a Regional Office responsibility. Where the Regional Administrator finds that an alternative model is more appropriate than a preferred model, that model may be used subject to the recommendations in appendix W. This finding will normally result from a determination that (1) a preferred air quality model is not appropriate for the particular application; or (2) a more appropriate model or analytical procedure is

available and is applicable." Therefore, EPA does have the discretion to identify a more appropriate analytical procedure without undergoing rulemaking on updates to Appendix W. Also, as discussed above, by reference to the modeling guidance, Appendix W was designed to allow changes in the predictive tools and data bases without undergoing additional rulemaking. In any event, the EPA is taking comment during the SIP rulemaking process on the application of its guidance.

A commenter also expressed concern that EPA applied unacceptably broad discretion in fashioning and applying the WOE determinations. EPA disagrees. The WOE determinations are made on a case-by-case basis. EPA has approved attainment demonstrations based on WOE determinations, generally with a requirement for additional reductions not modeled, only when the photochemical modeling provides a basis for believing that the SIP controls will achieve substantial ozone reductions, if not attainment levels. The fact that the WOE factors are incremental and differ between demonstrations, leads EPA to conclude these determinations may be made on a case-by-case basis, without hard-and-fast guidelines. Moreover, EPA believes that the WOE approach is bounded by the strength of the various factors that may be applied. The commenter added, as an example, EPA's application of the WOE approach to the Washington, DC attainment demonstration where modeling showing an ozone level (as adjusted) of 142 ppb was compared to the acceptable upper limit of 137 ppb. The commenter observed that EPA adjusted the modeled prediction on average by a factor of 19% to account for model over prediction, and stated that such an adjustment was not appropriate. In EPA's view, the 19% over prediction that underlies the 142 ppb level is only a rough approximation of the extent of modeling uncertainty. In EPA's view, consideration of model performance (specifically, a bias to under- or over-predict ozone levels) is one way to assess modeling uncertainty. To further address uncertainty, EPA applied the 1999 guidance to estimate the future design, in the same manner as applied to all of the other attainment demonstrations received. Both the assessment of model performance and the estimated future design value were used in the WOE determination.⁸

⁸ Observing that for the attainment demonstration for the Washington, D.C. area, EPA reduced modeled ozone values by 19% to account for model overprediction, a commenter criticized this technique as lacking technical justification. EPA

The commenter also complained that EPA has applied the WOE determinations to adjust modeling results only when those results indicate nonattainment, and not when they indicate attainment. WOE is not used to adjust model results. WOE is additional analysis that is reviewed when there is reason to question the attainment demonstration. For the current demonstrations under proposal, EPA's decision to approve the demonstrations relied not only on the modeling, but other WOE, as well. For example, EPA considered current air quality, model performance (over- as well as under-prediction), number of episode days, model predicted future design values, and results from the regional modeling for the NO_x SIP Call, where applicable. For a given attainment demonstration any one of these elements could have indicated the area may not attain. But collectively the information supported EPA's decision. EPA has applied WOE determinations to all of the current demonstrations under proposal, although except for the Chicago and Milwaukee attainment demonstrations, the modeling results submitted do not pass the recommended "modeled attainment test." Reference the individual proposals for how WOE was applied in each case. These determinations were made based on EPA's best understanding of the problem and relied on a qualitative assessment as well as quantitative assessments of the available information. In some cases, EPA believed the demonstration of attainment was not conclusive, and in these cases EPA made the determination that additional emission reductions

guidance recommends assessment of model performance (both over- and under-prediction) as one of the factors affecting the model results. In general performance measures that fall within EPA recommended ranges are considered as an indication that the model is performing acceptably. For the Washington, D.C. area, EPA explained how performance was more closely reviewed and used as part of the WOE. The technique is described in "Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area," November 30, 1999. The modeled peak ozone results generally correlated (in geographic proximity) with the monitored peak ozone emissions (and the modeled plume generally correlated (in geographic proximity) with the observed ozone plume), except that the peak modeled ozone levels averaged approximately 19–20% higher than the peak monitored levels. Modeling uncertainties (including, for example, the non-linearity of the modeling) lead EPA to conclude that adjusting each modeled peak by the 19% average over-prediction was at least as sensible as adjusting each modeled peak by an amount that corresponds to that modeled peak's relationship to the monitored ozone value in the same vicinity.

were needed to strengthen the demonstration.

The commenter further criticized EPA's application of the WOE determination on grounds that EPA ignores evidence indicating that continued nonattainment is likely, such as, according to the commenter, monitoring data indicate that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM model. EPA did consider the monitoring data along with other information in these determinations. When reviewing the monitoring data, EPA considered other factors. For example, high monitoring values may have occurred for many reasons including, fluctuations due to changes in meteorology and lack of emission reductions. The 1999 monitor values do not reflect several control programs, both local and the regional which are scheduled for implementation in the next several years. And the 1999 meteorology in the Northeast was such that July 1999 was one of the warmest (ranked 9th) ever experienced since 1895.⁹ In addition to the heat, the middle and southern portions of the Northeast were also drier than average during this month. This information supports EPA's belief that the high exceedances observed in 1999 are not likely to reoccur frequent enough to cause a violation, once the controls adopted in these SIP's are implemented. There is little evidence to support the statement that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM. Since areas did not model 1999 ozone levels using 1999 meteorology and 1999 emissions which reflect reductions anticipated by control measures, that are or will be approved into the SIP, there is no way to determine how the UAM predictions for 1999 compare to the 1999 air quality. Therefore, we cannot determine whether or not the monitor values exceed the NAAQS by a wider margin than the UAM predictions for 1999. In summary, there is little evidence to support the conclusion that high exceedances in 1999 will continue to occur after adopted control measures are implemented.

In addition, the commenter argued that in applying the WOE determinations, EPA ignored factors showing that the SIPs under-predict

⁹ <http://www.ncdc.noaa.gov/ol/climate/research/1999/perspectives.html> and "Regional Haze and Visibility in the Northeast U.S."; NESCAUM at <http://www.nescaum.org/pdf/publist.pdf>.

future emissions, and the commenter included as examples certain mobile source emissions sub-inventories. EPA did not ignore possible under-prediction in mobile emissions. EPA is presently evaluating mobile source emissions data as part of an effort to update the computer model for estimating mobile source emissions. EPA is considering various changes to the model, and is not prepared to conclude at this time that the net effect of all these various changes would be to increase or decrease emissions estimates. For attainment demonstration SIPs that rely on the Tier 2/Sulfur program for attainment or otherwise (*i.e.*, reflect these programs in their motor vehicle emissions budgets), States have committed to revise their motor vehicle emissions budgets after the MOBILE6 model is released. EPA will work with States on a case-by-case basis if the new emission estimates raise issues about the sufficiency of the attainment demonstration. Corrections, if needed, will be made in time for the progress check in 2003 and if the analysis indicates additional measures are needed, EPA will take the appropriate action.

C. Reliance on NO_x SIP Call and Tier 2 Modeling

Comment: Given the uncertainty surrounding the NO_x SIP Call at the time of EPA's proposals on the attainment demonstrations, there is no basis for the conclusion reached by EPA that states should assume implementation of the NO_x SIP Call, or rely on it as a part of their demonstrations. The commenter references modeling data which demonstrates that the benefits of imposing NO_x SIP Call controls are limited to areas near the sources controlled.

The commenter adds that there are errors in the emissions used for the NO_x SIP Call Supplemental Notice (SNPR). The commenter believes that because of inaccurate inventories the modeling analyses, estimates of air quality based on that modeling, and estimates of EPA's Tier II tailpipe emissions reduction program not modeled in the demonstrations, are also flawed.

Response: In *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000), the court upheld the NO_x SIP Call on most issues, although a subsequent order of the court delays the implementation date to no later than May 31, 2004. EPA is moving forward to implement those portions of the rule that have been upheld, ensuring that most—if not all—of the emission reductions from the NO_x SIP Call assumed by the States in their 1-hour

ozone NAAQS attainment demonstrations will occur. EPA's modeling to determine the region-wide impacts of the NO_x SIP Call clearly shows that regional transport of ozone and its precursors is impacting nonattainment areas several states away, and this analysis was upheld by the court. Therefore, it is appropriate for States to seriously implement the NO_x SIP Call.

The EPA considered many factors when making these determinations. No single piece of information was determinant. It is important to recognize that the regional modeling for the Tier II rule was not used in the 1-hour attainment demonstrations and that the SNPR modeling was only one of several factors considered. EPA's decision was based on a qualitative assessment of the information presented. Information reviewed included results of the modeled attainment test, along with other supplemental information such as other modeled outputs (e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances and predicted changes in the ozone design value); actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; base year model performance; SNPR derived future design values; the responsiveness of the model predictions to further controls; and for some of the demonstrations estimates of additional emission reductions. EPA recognizes that any and all of this information has some degree of uncertainty, including the SNPR modeling. EPA recognizes that these uncertainties should be considered when making these determinations and that is why EPA considered other factors. EPA's weight of evidence determinations are not affected by error in any one piece of the information.

D. Impact of the NO_x SIP Call on Attainment of the 1-Hour NAAQS

Comment: One commenter states that Massachusetts's NO_x emissions interfere with attainment in downwind areas of New Hampshire and Maine and that Connecticut's NO_x emissions interfere with attainment in downwind areas of Massachusetts, New Hampshire and Maine. Therefore, the commenter states that significant additional NO_x reductions are needed for these areas to attain the 1-hour ozone NAAQS. The commenter also remarked that neither Massachusetts nor Connecticut has committed to adequate emission control strategies.

Response: In the final rule for the NO_x SIP Call (63 FR 57394, October 27, 1998), EPA indicated that Massachusetts

contains sources that contribute significantly to 1-hour nonattainment in Maine and New Hampshire, and that Connecticut contains sources that contribute significantly to 1-hour nonattainment in Massachusetts, Maine and New Hampshire. The NO_x SIP Call rule specified the emissions that Connecticut and Massachusetts were required to regulate to address their significant contribution to nonattainment in these downwind States. Massachusetts submitted a rule meeting the NO_x SIP Call on November 19, 1999, and EPA proposed approval of this rule on July 12, 2000 (65 FR 42907). Similarly, Connecticut submitted a rule in response to the NO_x SIP Call on October 1, 1999, and EPA proposed approval on July 12, 2000 (65 FR 42900). On October 20, 2000, the Regional Administrator signed notices fully approving these rules, and publication is expected soon. These rules have addressed Massachusetts's and Connecticut's contribution to ozone nonattainment in downwind areas. In addition, recent air quality monitoring data for 1998–2000, which have been quality assured, indicate that the Portland, ME, and Portsmouth-Dover-Rochester, NH, ozone nonattainment areas no longer violate the 1-hour ozone NAAQS.

E. RACM (Including Transportation Control Measures)

1. Comments on December 16, 1999 Proposal

Comment: Several commenters have stated that there is no evidence in several states that they have adopted reasonably available control measures (RACM) or that the SIPs have provided for attainment as expeditiously as practicable. Specifically, the lack of Transportation Control Measures (TCMs) was cited in several comments, but potential stationary source controls were also covered. One commenter stated that mobile source emission budgets in the plans are by definition inadequate because the SIPs do not demonstrate timely attainment or contain the emissions reductions required for all RACM. That commenter claims that EPA may not find adequate a motor vehicle emission budget (MVEB) that is derived from a SIP that is inadequate for the purpose for which it is submitted. The commenter alleges that none of the MVEBs submitted by the states that EPA is considering for adequacy is consistent with either the level of emissions achieved by implementation of all RACM; nor are they derived from SIPs that provide for attainment. Some commenters stated

that for measures that are not adopted into the SIP, the State must provide a justification for why they were determined to not be RACM.

Response: The EPA reviewed the SIP submittals for the four serious areas (Greater Connecticut, Western Massachusetts (Springfield); Metropolitan Washington, D.C.; and Atlanta, Georgia¹⁰) and determined that they did not include sufficient documentation concerning available RACM measures. Therefore, EPA reviewed numerous potential RACM measures. As part of this review, EPA developed an analysis, which has been placed in the dockets for the SIPs for the serious areas to help address this issue: "RACM Analysis for Four Serious Areas Designated Nonattainment for 1-hr Ozone NAAQS." U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; and Office of Transportation and Air Quality, Ann Arbor, MI 48105. October 12, 2000. An electronic version of EPA's RACM analysis cited above can be downloaded at www.epa.gov/ttn/rto under "What's New." The EPA published a notice of availability of this material on October 16, 2000 (65 FR 61134) and provided initially a 15 day public comment period on the material. The EPA extended the public comment period on this supplemental material for an additional 15 days in a notice published November 2, 2000 (65 FR 65818) and corrected on November 9, 2000 (65 FR 67319).

Section 172(c)(1) of the Act requires SIPs to contain RACM and provides for areas to attain as expeditiously as practicable. EPA has previously provided guidance interpreting the requirements of 172(c)(1). See 57 FR 13498, 13560. In that guidance, EPA indicated its interpretation that potentially available measures that would not advance the attainment date for an area would not be considered RACM. EPA also indicated in that guidance that states should consider all potentially available measures to determine whether they were reasonably available for implementation in the area, and whether they would advance the attainment date. Further, states should indicate in their SIP submittals whether measures considered were reasonably available or not, and if measures are reasonably available they must be adopted as RACM. Finally, EPA indicated that

¹⁰ These responses to comments will not address Atlanta; that will be addressed in the future when EPA takes final rulemaking action on the Atlanta SIP.

states could reject measures as not being RACM because they would not advance the attainment date, would cause substantial widespread and long-term adverse impacts, or would be economically or technologically infeasible. The EPA also issued a recent memorandum re-confirming the principles in the earlier guidance, entitled, "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas." John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

The EPA's RACM analysis cited above evaluated emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationship to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional RACM are available after adoption of Clean Air Act (Act) required measures for the four serious ozone nonattainment areas. The analysis supplemented the December 16, 1999 proposals to approve the 1-hour O₃ NAAQS attainment demonstrations in these areas.

Based on this analysis and other information discussed below, EPA concluded that additional emission control measures would not advance the attainment date and therefore do not constitute RACM in three nonattainment areas: Greater Connecticut; Springfield, Massachusetts; and Metropolitan Washington. The EPA therefore concludes that the SIPs for these areas meet the requirement for adopting RACM.

In addition to control measures already implemented locally, each of the three areas relies in large part on reductions from outside the nonattainment areas from EPA's NO_x SIP Call rule or section 126 rule (65 Fed. Reg. 2674, January 18, 2000) to reach attainment. In the NO_x SIP Call, 63 Fed. Reg. 57356, EPA concluded that reductions from various upwind states were necessary to provide for timely attainment in nonattainment areas in various downwind states, including all four of the nonattainment areas that were the subject of this analysis. The NO_x SIP Call therefore established requirements for control of sources of significant emissions in all upwind states. However, these reductions were not slated for full implementation until May 2003. Further, the United States

Court of Appeals for the District of Columbia Circuit recently ordered that EPA could not require SIPs to provide for full implementation of the NO_x SIP Call prior to May 2004. *Michigan, et al., v. EPA*, D.C. Cir. No. 98-1497, Order of Aug. 30, 2000.¹¹

The attainment demonstrations for these three serious areas indicate that the ozone benefit expected to be achieved from regional NO_x reductions (such as the NO_x SIP Call) are substantial. (See the individual attainment demonstrations in the docket for each of these areas.)

EPA had proposed to approve an attainment date extension beyond the original attainment date specified in the Clean Air Act (November 1999) for each of the three serious areas: to 2007 for Greater Connecticut; to 2003 for Western Massachusetts; and to 2005 for Metropolitan Washington. The rationale for such extensions is discussed in detail extensions elsewhere in these responses to comments. Briefly, however, the extensions are being given mainly due to the fact that these areas will have to rely on emission reductions from upwind areas. Some of those upwind reductions will be provided under the NO_x SIP Call rule with compliance in 2004, and from the section 126 rule, with compliance in 2003. Additional reductions from other nonattainment areas are relied on by Greater Connecticut and the Metropolitan Washington, DC areas.

For Greater Connecticut—Greater Connecticut must rely on reductions from the New York City nonattainment area to reach attainment. The New York nonattainment area—classified severe—has a statutory attainment date of as late as 2007. The SIP submitted for New York City, which EPA has proposed to approve, establishes a 2007 attainment date. It is unlikely that all the emission reductions necessary to reduce sufficiently upwind emissions to bring Greater Connecticut into attainment will be obtained until the attainment year for New York City and the best available evidence indicates that date will be 2007. EPA's zero out modeling analyses conducted in support of EPA's NO_x SIP Call show that even eliminating all of Connecticut's emissions does not help Connecticut attain prior to the time New York City reaches attainment, since the effects of transport are so significant. (See 64 FR 70343.) Therefore, EPA concludes that additional emission reductions within Connecticut would

not advance the attainment date for the Greater Connecticut area, and thus that no additional measures are considered RACM.

For Metropolitan Washington—There is strong evidence to support the premise that the Washington, DC nonattainment area is impacted by transport from outside the modeled Washington-Baltimore area and cannot attain without upwind reductions. The response to comments on the issue of attainment date extensions for the Metropolitan Washington DC area provides a detailed discussion of the role of transport from within the modeling area and we do not repeat that information here. See section II. A. Based on that information, it has been clearly demonstrated that, until the Baltimore nonattainment area implements local controls and comes into attainment, there is the potential for high ozone and precursor emissions from the Baltimore nonattainment area to cause exceedances in the Washington, D.C. nonattainment area.

Based on the above, the Metropolitan Washington, DC area must rely on reductions from outside the nonattainment area to reach attainment. The Baltimore nonattainment area—classified severe—has a statutory attainment date of as late as 2005. The SIP submitted for Baltimore, which EPA has proposed to approve, establishes a 2005 attainment date. It is unlikely that all the emission reductions necessary to reduce sufficiently upwind emissions to bring Metropolitan Washington into attainment will be obtained until the attainment year for Baltimore, and the best available evidence indicates that date will be 2005. Therefore, EPA concludes that additional emission reductions within the Metropolitan Washington, D.C. area would not advance the attainment date for the area, and thus that no additional measures are considered RACM.

For Western Massachusetts and Metropolitan Washington:

1. Many of the measures designed to achieve emissions reductions from within these nonattainment areas—in particular, the regional NO_x reductions—will also not be fully implemented until just prior to each area's respective attainment date. One could argue that the local measures needed for attainment in these two areas could be implemented earlier and advance attainment. Additional reductions beyond those already provided for in the SIPs for these two areas could potentially be implemented in the interim period prior to the reductions from these upwind controls; however, they would only be needed for

¹¹ Several States (DE, PA, CT, MA, RI, MD, NY, NJ) have submitted plans providing for reductions by 2003. EPA has fully approved three of these plans (CT, MA, RI).

an interim period of time, after which the State could actually replace them if the State submits a new attainment demonstration showing they were no longer necessary. The interim implementation of such measures could likely result in cases where sources would have to install controls, and then would be relieved of such responsibility, which could be disruptive. Thus, EPA believes this situation—where the local controls would only marginally advance attainment—supports a finding that the additional controls would not be considered RACM.

2. Also, the development of rules for sources in the Western Massachusetts and Metropolitan Washington nonattainment areas for which little control information may exist—especially a large number of very different source categories of small sources—will likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from upwind controls, such as the NO_x SIP Call rule and the section 126 rule.

For all three areas—One could also argue that the measures needed in the upwind area that is affecting the area in question could be implemented earlier and therefore could result in earlier attainment. The EPA recognizes that it has not taken final rulemaking on the severe areas that affect the three serious areas in question (New York for the Greater Connecticut and Western Massachusetts nonattainment areas, and Baltimore for the Metropolitan Washington nonattainment area). However, since EPA must take rulemaking action on the three serious areas at this time, and because it does not have information to the contrary at this point, EPA must presume the attainment dates submitted by the States and for which EPA proposed approval on December 16, 1999, and therefore presume that emission controls for those severe areas will be implemented as expeditiously as practicable on a schedule to achieve those reductions. Because EPA proposed to approve the attainment dates for the severe areas in question, it is reasonable to assume that the severe areas cannot implement their measures to achieve attainment any more expeditiously.

Thus, EPA believes that implementation of additional measures

in the three nonattainment areas will not advance the attainment date, prior to the time of full implementation of the SIP call and/or the section 126 rule and, for Greater Connecticut and Metropolitan Washington, prior to implementation by the upwind area of all local measures needed to attain by the area's attainment date.

Therefore, EPA concludes, based on the available documentation, that the reductions from additional control measures will not advance attainment, and thus none of these potential measures analyzed can be considered RACM for purposes of section 172(c)(1) for these three areas for their 1-hour ozone standard attainment demonstration.

Although EPA does not believe that section 172(c)(1) requires implementation of additional measures for these three serious areas, this conclusion is not necessarily valid for other areas. For 1-hour ozone nonattainment areas classified as severe, for instance, some of which are the “upwind” areas referred to in the above responses for serious areas, such measures may in fact be RACM, and the States in which such areas are located have a responsibility to perform an analysis of whether additional measures are RACM. EPA is about to issue additional guidance concerning the RACM requirement for the severe areas. In addition, if in the future EPA moves forward to implement another ozone standard, this RACM analysis would not control what is RACM for these or any other areas for that other ozone standard.

Also, EPA has long advocated that States consider the kinds of control measures that the commenters have suggested, and EPA has indeed provided guidance on those measures. See, e.g., <http://www.epa.gov/otaq/transp.htm>. In order to demonstrate that they will attain the 1-hour ozone NAAQS as expeditiously as practicable, some areas may need to consider and adopt a number of measures—including the kind that EPA itself evaluated in the RACM analysis for the three serious areas—that even collectively do not result in many emission reductions. Furthermore, EPA encourages areas to implement technically available and economically feasible measures to achieve emissions reductions in the short term—even if such measures do not advance the attainment date—since such measures will likely improve air quality. Also, over time, emission control measures that may not be RACM now for an area may ultimately become feasible for the same area due to advances in control technology or more

cost-effective implementation techniques. Thus, areas should continue to assess the state of control technology as they make progress toward attainment and consider new control technologies that may in fact result in more expeditious improvement in air quality.

Discussion of other factors related to RACM, such as economic and technological feasibility, are discussed below in responses to comments on EPA's RACM analysis.

Elsewhere in this response to comments, EPA addresses the issue of whether the attainment dates are as expeditious as practicable and that discussion is not repeated here.

EPA previously responded to comments concerning the adequacy of MVEBs when EPA took final action determining the budgets adequate and does not address those issues again here. The responses are found at <http://www.epa.gov/oms/transp/conform/pastsips.htm>.

Comments on the supplemental material were received from several commenters and are addressed below.

Note that the response to the comment related to severe areas will be provided at the time EPA takes final rulemaking action on those areas.

2. Comments on October 16, 2000 Notice of Availability

Comment 1: EPA cannot invent rationales for the states: EPA's role is limited to reviewing what the states have submitted, and approving or disapproving it. 42 U.S.C. 7410(k)(3); *Riverside Cement Co. v. Thomas*, 843 F.2d 1246 (9th Cir. 1988). EPA “may either accept or reject what the state proposes; but EPA may not take a portion of what the state proposes and amend the proposal ad libitum.” *Id.* If states are going to reject control measures, their decision to do so and the rationale therefore must be subject to notice and hearing at the state and local level.

Response 1: The SIP submittals from the States for the Metropolitan Washington, Western Massachusetts, and the Greater Connecticut nonattainment areas contained no measures adopted for the sole purpose of satisfying the RACM requirement. The public did have a chance to comment at the State level on the fact that there were no additional measures. The EPA interpreted this lack of additional measures as an indication that the State did not identify any additional measures as meeting the RACM requirement under section 172(c)(1). The EPA did not amend the SIP; EPA supplemented the rationale

and approved the SIP with an explanation of why it was acceptable for the State to identify no additional measures to meet the RACM requirement of the Clean Air Act.

The commenter cites *Riverside Cement* for the proposition that EPA cannot perform an analysis of whether the State's plan complies with the CAA's RACM requirement. The EPA believes that the holding of that case is inapplicable to these facts. In *Riverside Cement*, EPA approved a control requirement establishing an emission limit into the SIP and disregarded a contemporaneously-submitted contingency that would allow the State to modify the emission limit. Thus, the court concluded that EPA "amended" the State proposal by approving into the SIP something different than what the State had intended. 843 F.2d at 1248. In the present circumstances, EPA did not attempt to modify a substantive control requirement of the submitted plan. Rather, EPA performed additional analyses to determine if the plan, as submitted, fulfilled the substantive RACM requirement of the Act. As a general matter, EPA believes that States should perform their own analyses of RACM (as well as submitting other supporting documents for the choices they make). The statute places primary responsibility on the States to submit plans that meet the Act's requirements. However, nothing in the Act precludes EPA from performing those analyses, and the Act clearly provides that EPA must determine whether the State's submission meets the Act's requirements. Under that authority, EPA believes that it is appropriate, though not mandated, that EPA perform independent analyses to determine whether a submission meets the requirements of the Act. The EPA has not attempted to modify the State's submission by either adding or deleting a substantive element of the submitted plan. By virtue of the supplemental RACM analysis, EPA has concluded that the State's initial submission contains control measures sufficient to meet the RACM requirement.

Comment 2 (a): Inappropriate grounds for rejecting RACM. The commenter claims that EPA's bases for rejecting measures as RACM are inappropriate considerations: (a) The measures are "likely to require an intensive and costly effort for numerous small area sources"; or (b) the measures "do not advance the attainment dates" for the four areas. 65 Fed. Reg. at 61134. Neither of these grounds are legally or rationally sufficient bases for rejecting control measures.

Response 2(a): The EPA's approach toward the RACM requirement is grounded in the language of the Clean Air Act. Section 172(c)(1) states that a SIP for a nonattainment area must meet the following requirement, "In general.—Such plan provisions shall provide for the implementation of *all reasonably available control measures as expeditiously as practicable* (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall *provide for attainment of the national primary ambient air quality standards.*" [Emphasis added.] The EPA interprets this language as tying the RACM requirement to the requirement for attainment of the national primary ambient air quality standard. The Act provides that the attainment date shall be "as expeditiously as practicable but no later than * * *" the deadlines specified in the Act. EPA believes that the use of the same terminology in conjunction with the RACM requirement serves the purpose of specifying RACM as the way of expediting attainment of the NAAQS in advance of the deadline specified in the Act. As stated in the "General Preamble" (57 FR 13498 at 13560, April 16, 1992), "The EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area as *components of the area's attainment demonstration.*" [Emphasis added.] In other words, because of the construction of the RACM language in the CAA, EPA does not view the RACM requirement as separate from the attainment demonstration requirement. Therefore, EPA believes that the Act supports its interpretation that measures may be determined to not be RACM if they do not advance the attainment date. In addition, EPA believes that it would not be reasonable to require implementation of measures that would not in fact advance attainment. See 57 FR 13560.

The term "reasonably available control measure" is not actually defined in the definitions in the Act. Therefore, the EPA interpretation that potential measures may be determined not to be RACM if they require an intensive and costly effort for numerous small area sources is based on the common sense meaning of the phrase, "reasonably available." A measure that is reasonably available is one that is technologically and economically feasible and that can

be readily implemented. Ready implementation also includes consideration of whether emissions from small sources are relatively small and whether the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. As stated in the General Preamble, EPA believes that States can reject potential measures based on local conditions including cost. 57 FR 13561.

Also, the development of rules for a large number of very different source categories of small sources for which little control information may exist will likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules in the three nonattainment areas would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from upwind controls, such as from the NO_x SIP Call and controls from severe areas with later statutory attainment dates.

Comment 2(b): EPA's approach also illegally assumes that the attainment dates for these areas can be extended beyond November 15, 1999 via the Agency's downwind transport policy.

Response 2(b): As noted above, EPA concluded that RACM is linked in the language of the Clean Air Act to the attainment date. We elsewhere respond to comments that object to EPA's approval of attainment date extensions and do not restate those responses here. See Section II. A. Once an attainment date is set for an area, an analysis can then be made to determine whether any additional measures that may potentially be RACM would advance that attainment date.

Comment 3: Failure to quantify reductions needed to attain sooner: Even if advancement of the attainment date were a relevant test for RACM, EPA has failed to rationally justify its claim that additional control measures would not meet that test. To begin with, neither the Agency nor the states have quantified in a manner consistent with EPA rules and guidance the emission reductions that would be needed to attain the standard prior to achievement of emission reductions required under the NO_x SIP Call.

Response 3: Elsewhere in this response to comments on the proposed approval of the 1-hour ozone SIPs, EPA addresses the issue of the attainment date extension. See section II. A. EPA has therein justified the position that areas affected by transport may need

additional time to attain—and in some cases may need an extension out to either the date the NO_x SIP Call will be implemented or the attainment date of an upwind area if it cannot attain without the reductions from the upwind area. In the case of Greater Connecticut, it would be futile to perform analyses of whether additional emission reductions in the nonattainment area—whether RACM or beyond RACM—would advance the attainment date when it is already demonstrated through modeling that the area cannot attain sooner than the upwind New York City nonattainment area that needs to control. In addition, all local measures needed for attainment are already being implemented. EPA considers this implementation as expeditious as practicable. In the case of Western Massachusetts, all local measures are already being implemented also. EPA also considers this implementation as expeditious as practicable. Issues concerned with timing of implementation of additional measures are also discussed above for the three serious areas.

For all three areas, EPA's section 126 rule requires compliance with covered emission reductions in 2003, which EPA considers as expeditiously as practicable for those sources. Additional discussion of the Metropolitan Washington nonattainment area appears below.

Comment 4: Inadequate RACM analysis: EPA's RACM analysis is grossly inadequate in several key respects.

Comment 4(a): EPA's analysis fails to provide the technical basis and calculations by which it developed its emission reduction estimates for various measures. EPA failed to provide citations to the literature regarding estimates of emission reductions for various TCMs. EPA failed to specify the level of implementation assumed for some of the TCMs in the analysis.

Response 4(a): EPA's RACM analysis (found at www.epa.gov/ttn/rto) did provide the technical basis and calculations for its emission reduction estimates for controls possible for the source categories in the emission inventory. The commenter apparently believes EPA's analysis is insufficient, however. The technical basis for the analyses and the assumptions used in the calculation of estimated emission reductions were derived from a review of the literature on the implementation and effectiveness of TCM's.¹² The TCMs

evaluated depend on the level of implementation. Implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Comment 4(b): EPA's analysis looks at only a small universe of potential measures, and does not evaluate all of the measures identified in public comment and other sources.

Response 4(b): EPA's RACM analysis was intended to address all potential categories of stationary and mobile sources that could provide additional emission reductions that might be considered RACM. The EPA believes that all identified measures were included in the categories addressed in the analysis.

Comment 4(c): EPA's analysis also completely fails to consider the additional benefits likely from combined implementation of complementary TCMS *e.g.*, parking management along with transit improvements. It is arbitrary and irrational for EPA to assume that these measures can and will be implemented in complete isolation from one another.

Response 4(c): EPA recognizes that many control measures—particularly TCMS—are more effective if done in conjunction with others. EPA maintains, however, that it would be impossible to analyze a seeming infinite set of combinations of measures for possible benefits. The EPA's analysis did look at all measures in various categories and concluded that as a whole these categories of measures would not advance attainment or would otherwise not be reasonably available.

Comment 5: Stationary sources: The analysis of potential emission reductions from additional stationary source measures is flawed in several key respects.

Comment 5(a): First, EPA arbitrarily excluded from any consideration the bottom 20% of the stationary source categories.

Response 5(a): EPA does not consider this exclusion arbitrary, since it was designed to eliminate from

consideration controls on a number of source categories that were not expected to yield many emission reductions. The EPA believed that controls on categories with very low emission reduction potential would not constitute RACM. The fact that none of the top 80 percent of the categories considered for additional controls yielded measures that EPA considered RACM for the areas in question validates EPA's decision not to analyze separately the bottom 20 percent of the categories, which would cumulatively have achieved fewer emission reductions. Therefore, EPA concludes that control measures applied to the bottom 20 percent of the categories are also not RACM.

Comment 5(b): Second, EPA did not consider potential additional controls on electric generating units and point source combustion sources.

Response 5(b): Undoubtedly there are additional controls that could be placed on electric generating units and point source combustion sources. However, EPA believes that the implementation of the RACT requirements in nonattainment areas and, more importantly, the implementation of the NO_x SIP Call in all areas affecting the nonattainment areas in general provide a level of control that represents all reasonably available controls for these sources in the areas in question. The EPA believes that generally, the level of NO_x emissions control required under the NO_x SIP Call for larger sources, including electric generating units and point source combustion sources, is greater than the level of control presumed by EPA under the NO_x RACT requirement. The NO_x SIP Call is based on a level of highly cost effective controls, characterized as having a \$2000 per ton cost effectiveness or less (63 FR 57400, October 27, 1998). The presumptive level of RACT provided in EPA guidance is based on cost effectiveness up to \$1300 per ton (Memorandum of March 16, 1994, from D. Kent Berry re: "Cost-Effective Nitrogen Oxides (NO_x) Reasonably Available Control Technology (RACT)"). EPA acknowledges that controls with costs higher than \$2000 per ton are available and may be cost-effective. However, the control costs do not reflect other concerns regarding reasonableness of control. EPA received comments that predicted problems with availability of electrical generation even at the NO_x SIP Call level of control; therefore, in its final NO_x SIP Call rule, EPA included provisions for a NO_x supplement pool to allow more time for some units to come into compliance and thus minimize potential power availability problems. At control levels greater than

¹² Transportation Control Measures: State Implementation Plan guidance, US EPA 1992; Transportation Control Measure Information

Documents, US EPA 1992; Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature, National Association of Regional Councils 1994.

those in the NO_x SIP Call rule, EPA believes the time States would need to provide for sources to come into compliance while avoiding power availability problems would be more than the current amount of time for Western Massachusetts and Metropolitan Washington to attain. Therefore, EPA had determined that such additional controls do not constitute RACM.

Comment 5(c): Third, EPA assumes that only a 50% level of control is achievable for the uncontrolled emissions. This completely unsupported claim is hard to fathom.

Response 5(c): EPA's long-standing guidance on the RACT requirement for stationary sources of VOC has generally assumed a presumptive norm of 81 percent control efficiency; this efficiency was based on the assumption of a 90 percent capture efficiency and 90 percent control efficiency of the captured emissions ($0.9 \times 0.9 = 0.81$). However, the specific VOC RACT control techniques guidelines were developed for emission sources for which much information about emissions and controls was available. The RACT rules often apply to smaller sources as well as to major sources. There is not nearly as much information available concerning source categories for which RACT guidelines have not been developed; nor is there information regarding what controls are appropriate for the smaller sources that are not already subject to RACT. Therefore, without further information, EPA was hesitant to assume an 81 percent level of control. EPA therefore chose a 50 percent level of control for VOC control, which EPA believes is reasonable in light of our limited knowledge on available controls.

The EPA established guidance to States in complying with the Clean Air Act's requirements for NO_x RACT in the NO_x Supplement to the General Preamble (57 FR 55620, November 25, 1992). That guidance addressed RACT for major stationary sources of NO_x. Under section 182(b)(2) of the Act, moderate and higher ozone nonattainment area SIPs—and also SIPs for all areas in the Ozone Transport Region—were already required to contain provisions for applying a reasonably available level of control for NO_x for major stationary sources. For NO_x emission control for other sources, when EPA published the NO_x SIP Call (63 FR 57402, October 27, 1998), EPA evaluated other levels of control for categories of stationary sources that were not included in the highly cost-effective controls assumed for establishing the level of control

reflected in the Statewide NO_x emission budgets in that rule. The EPA determined that for area sources, additional controls that were technologically feasible and highly cost-effective could not be identified. The EPA determined that for small point sources, their collective emissions were relatively small and the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. Nonetheless, for the purpose of the RACM analysis, EPA did assume a level of control for sources with potential for control. In light of the lower level of confidence in information concerning NO_x controls on these sources, and the conclusion concerning cost effectiveness, however, EPA believed it had to take a more conservative approach, and thus chose a lower level of control, namely 50 percent. The EPA believes this level is reasonable in light of these facts.

Comment 6: Transportation Control Measures as RACM: EPA gives virtually no consideration to the emission reduction benefits of transportation programs, projects and services contained in adopted regional transportation plans (RTPs), or that are clearly available for adoption as part of RTPs adopted for a nonattainment area. In addition, it is arbitrary and capricious for EPA not to require as RACM economic incentive measures that are generally available to reduce motor vehicle emissions in every nonattainment area.

Response 6: EPA's notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) does consider transportation programs, projects and services that are generally adopted, or available for inclusion in a nonattainment area's regional transportation plan (RTP) and Transportation Improvement Program (TIP). The RACM analysis includes seven broad categories and twenty-seven subcategories of Transportation Control Measures (TCMs) that represent a range of programs, projects and services that can be included in RTP's and TIP's. The inclusion of a TCM in an RTP or TIP does not necessarily mean that it meets EPA's criteria for RACM and must be included in the SIP. EPA has concluded that implementation of these TCM's would not advance the attainment date for the Greater Connecticut, Western Massachusetts, or Metropolitan Washington nonattainment areas, and therefore are not considered RACM for purposes of the attainment SIPs for those three areas.

Some of these TCM's, such as parking cashout, transit subsidies, and parking

pricing, are explicitly economic incentive programs. Furthermore, these categories of TCMs, as well as most of the others, could be infinitely differentiated according to criteria, such as the method of implementation, level of promotional effort or market penetration, stringency of enforcement, etc. The application of economic incentives to increase the effectiveness of a TCM is one such criterion. These implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Also, there are many important reasons why a state, regional, or local planning agency might implement TCMs in an integrated traffic management plan beyond whatever air quality benefits the TCMs might generate, including preserving open space, water shed protection, avoiding sprawl, mitigating congestion, and "smart growth" planning generally. So the fact that TCMs are being implemented in certain ozone nonattainment areas does not necessarily lead one to the conclusion that those TCMs represent mandatory RACM measures when they are analyzed primarily for the purpose of determining whether they would advance the ozone attainment date.

Comment 7: Washington, D.C. area analysis: Having refused to consider a wide range of measures for this area, and understating the potential benefits of others, EPA asserts that available measures would not advance the attainment date in Washington because: (a) The area relies heavily on control of transported emissions and ozone; and (b) the modeling indicates that NO_x reductions are generally more beneficial in reducing ozone levels, suggesting that the area may be NO_x limited. The first point is truly irrelevant to the RACM inquiry. Even if the issue is whether additional measures could advance the attainment date, that inquiry is not informed by whether the area might attain by 2005 due to NO_x SIP Call reductions, but by whether it could attain sooner than 2005 through additional local emission reductions. As to the second point, the modeling does not show that NO_x reductions are inherently more beneficial. They merely show that under some circumstances

generally involving very substantial NO_x reductions (e.g., 60% cuts) NO_x reductions might provide greater benefits per ton. The same model shows that NO_x reductions can sometimes actually lead to increased ozone levels in some cells. Even if the ozone problem in the Washington area is NO_x limited, that hardly justifies eschewing additional measures; at most it would suggest focusing more heavily on additional measures for NO_x sources. The commenter also attached a summary of South Coast AQMD Clean Fleet Rules.

Response 7: The sensitivity analyses that were performed with the photochemical grid model for the Baltimore-Washington area (see Attachment 4 of the RACM analysis) showed that, even with smaller NO_x emission reductions (e.g., 30% from the area and mobile sectors), the ozone benefits that are achieved are substantially greater than the minor ozone benefits achieved from similar VOC emission reductions. Therefore, EPA stands by its belief that the levels of VOC reductions in the Metropolitan Washington, DC area that could be achieved by additional stationary and mobile source control measures that are potentially RACM would not improve ozone levels to the point that would result in advancing the attainment date. Furthermore, EPA's analysis demonstrated that the source categories that were available for mobile NO_x controls were considered too limited—even with the area's ability to benefit from NO_x controls—to advance the attainment date.¹³ Also, EPA's analysis of levels of NO_x reductions in the Metropolitan Washington, DC area that could be achieved by additional stationary source controls that are potentially RACM would have to come from a large number of small sources where EPA does not have much guidance for control, and therefore could be costly to develop. Therefore, EPA concluded that additional controls on the source categories evaluated would not be considered RACM. It should be noted that the modeling was done for a modeling domain encompassing both Baltimore and Washington. The sensitivity analyses were performed for the entire area. Baltimore is classified severe with a 2005 attainment date, whereas the Metropolitan Washington

nonattainment area is classified as a serious area. EPA has proposed to approve an attainment date extension for the Metropolitan Washington, D.C. area precisely because the modeling shows that additional controls are needed for the Washington area to come into attainment—both from outside the modeling domain, and from within the Baltimore area. Other reasons for why EPA does not consider additional measures to be RACM for the Metropolitan Washington, D.C. area are discussed elsewhere in these responses to comments.

Comment 8: EPA did not provide sufficient notice and time to permit adequate comment.

Response 8: In its initial notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) EPA offered a 15 day comment period (to October 31, 2000). On November 2, 2000 (65 FR 65818), EPA extended the comment period an additional 15 days, specifically stating that this would provide a total of 30 days for public comment. Unfortunately, that notice was published with a typographical error that appeared to extend the comment period an additional year and 15 days. Therefore, on November 9, 2000 (65 FR 67319), EPA published a correction to clearly extend the comment period 15 days from October 31, 2000, to November 15, 2000. EPA believes 30 days is an adequate period for public comment. The first notice to extend the public comment period (the November 2, 2000 notice) made it quite clear that the extension was for only 15 days to provide a total of 30 days for comment; EPA believes no possible confusion should have resulted from the fact that the end date of the comment period contained a typographical error.

Comment 9: EPA is trying to circumvent obligations under 2 Consent Decrees (MOG vs EPA and NRDC v. Browner).

Response 9: This comment refers to consent decrees filed in two cases: *NRDC v. Browner*, No. 99-2976 (D.D.C.) and *Midwest Ozone Group v. EPA*, No. 00-1047 (D.D.C.). In *NRDC*, the consent decree provides that by November 15, 2000, EPA shall propose a federal implementation plan (FIP) for the Springfield, Massachusetts; Greater Connecticut; and Metropolitan Washington, DC nonattainment areas if EPA has not approved full attainment demonstration SIP for that area. The consent decree for *Midwest Ozone Group* is similar, but not identical. It provides that EPA shall propose federal implementation plans (FIPs) for two of the three nonattainment areas—Springfield, Massachusetts and Greater

Connecticut—if EPA has not proposed approval of a full attainment demonstration SIP for that area. The EPA met its obligation under the *Midwest Ozone Group* decree when it proposed approval of the full attainment demonstration SIPs for those two areas on December 16, 1999. 64 FR 70319 and 64 FR 70332. On November 6, 2000, the District Court granted EPA's unopposed motion to extend the deadline for action under the *NRDC* decree until December 15, 2000 for each of the three areas. On December 7, 2000, the court further extended the date for EPA action with respect to Springfield until December 22, 2000. The EPA has complied with the *NRDC* consent decree with respect to the Greater Connecticut and Metropolitan Washington, D.C. areas. The appropriate Regional Administrators signed final rulemaking actions approving the full attainment demonstration SIPs for those two areas by December 15, 2000. The EPA is on track to comply with the *NRDC* consent decree for the Springfield, Massachusetts nonattainment area by December 22, 2000.

Comment 10: Since EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA must disapprove the SIPs and propose a FIP.

Response 10: Although EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA believes it does have authority to supplement the record and conclude that the SIPs for these two areas meet the RACM requirement of the Act. See above the response to comment.

F. Reliance on Commitments and State Rules Not Yet Adopted

Comment: Several commenters disagreed with the EPA's proposal to approve attainment demonstrations and rate-of-progress plans for the Springfield, Massachusetts, Greater Connecticut, and Metropolitan Washington, DC ozone nonattainment areas because not all of the emissions reductions credited in the demonstrations or plans are supported by legally enforceable limitations adopted and approved by the state or District and approved by the EPA as part of the SIP. Commenters also objected to accepting enforceable state commitments to adopt emission reduction control measures in the future in lieu of current adopted measures.

Response: The EPA has approved previously, or is approving together with the attainment demonstrations, all outstanding emission reduction limitations relied on for attainment for these three areas. Thus, none of the three areas on which the EPA is

¹³ RACM Analysis for Four Serious Areas Designated Nonattainment for 1-hr Ozone NAAQS. U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; and Office of Transportation and Air Quality, Ann Arbor, MI 48105. October 12, 2000. p. 6.

approving have commitments to adopt emission reduction measures in the future and all emission reductions rules relied on for attainment have been fully approved by the EPA.

G. Adequacy of Motor Vehicle Emissions Budgets

Comment: We received a number of comments about the process and substance of EPA's review of the adequacy of motor vehicle emissions budgets for transportation conformity purposes. (Conservation Law Foundation, Environmental Defense Fund and Natural Resources Defense Council, New York Department of Transportation, New York State Department of Environmental Conservation, EarthJustice, Southern Environmental Law Center)

Response: EPA's adequacy process for these SIPs has been completed, and we have found the motor vehicle emissions budgets in all of these SIPs to be adequate. We have already responded to any comments related to adequacy when we issued our adequacy findings, and therefore we are not listing the individual comments or responding to them here. Our findings of adequacy and responses to comments can be accessed at www.epa.gov/otaq/traq (once there, click on the "conformity" button). At the web site, EPA regional contacts are identified.

H. Motor Vehicle Emissions Inventory

Comment: Several commenters stated that the motor vehicle emissions inventory is not current, particularly with respect to the fleet mix. Commenters stated that the fleet mix does not accurately reflect the growing proportion of sport utility vehicles and gasoline trucks, which pollute more than conventional cars. Also, a commenter stated that EPA and states have not followed a consistent practice in updating SIP modeling to account for changes in vehicle fleets. For these reasons, commenters recommend disapproving the SIPs. (Environmental Defense Fund and Natural Resources Defense Council; EarthJustice; Southern Environmental Law Center)

Response: All of the SIPs on which we are taking final action are based on the most recent vehicle registration data available at the time the SIP was prepared. The SIPs use the same vehicle fleet characteristics that were used in the most recent periodic inventory update. The Metropolitan Washington, DC Ozone Nonattainment Area SIP is based on vehicle registration data from 1996, which is the most recent data available at the time the SIP was prepared and submitted. Clearly the

1999 data could not have been used in motor vehicle emissions projections prepared in the fall of 1998 as documented in appendix D of the SIP. EPA requires the most recent available data to be used, but we do not require it to be updated on a specific schedule. Therefore, different SIPs base their fleet mix on different years of data. Our guidance does not suggest that SIPs should be disapproved on this basis. Further, EPA does not require states to go back and reanalyze SIP submissions if new data becomes available shortly before EPA takes final action on the SIP. Nevertheless, we do expect that revisions to these SIPs that are submitted using MOBILE6 (as required in those cases where the SIP is relying on emissions reductions from the Tier 2 standards) will use updated vehicle registration data appropriate for use with MOBILE6, whether it is updated local data or the updated national default data that will be part of MOBILE6. EPA is requiring the Metropolitan Washington, DC area states to revise the attainment budgets using MOBILE6.

I. VOC Emission Reductions

Comment: For States that need additional VOC reductions, this commenter recommends a process to achieve these VOC emission reductions, which involves the use of HFC-152a (1,1 difluoroethane) as the blowing agent in manufacturing of polystyrene foam products such as food trays and egg cartons. HFC-152a could be used instead of hydrocarbons, a known pollutant, as a blowing agent. Use of HFC-152a, which is classified as VOC exempt, would eliminate nationwide the entire 25,000 tons/year of VOC emissions from this industry.

Response: EPA has met with the commenter and has discussed the technology described by the company to reduce VOC emissions from polystyrene foam blowing through the use of HFC-152a (1,1 difluoroethane), which is a VOC exempt compound, as a blowing agent. Since the HFC-152a is VOC exempt, its use would give a VOC reduction compared to the use of VOCs such as pentane or butane as a blowing agent. However, EPA has not studied this technology exhaustively. It is each State's prerogative to specify which measures it will adopt in order to achieve the additional VOC reductions it needs. In evaluating the use of HFC-152a, States may want to consider claims that products made with this blowing agent are comparable in quality to products made with other blowing agents. Also the question of the over-all long term environmental effect of

encouraging emissions of fluorine compounds would be relevant to consider. This is a technology which States may want to consider, but ultimately, the decision of whether to require this particular technology to achieve the necessary VOC emissions reductions must be made by each affected State. Finally, EPA notes that under the significant new alternatives policy (SNAP) program, created under CAA § 612, EPA has identified acceptable foam blowing agents many of which are not VOCs (<http://www.epa.gov/ozone/title6/snap/>).

J. Credit for Measures Not Fully Implemented

Comment: States should not be given credit for measures that are not fully implemented. For example, the States are being given full credit for Federal coating, refinishing and consumer product rules that have been delayed or weakened.

Response: Architectural and Industrial Maintenance (AIM) Coatings: On March 22, 1995 EPA issued a memorandum¹⁴ that provided that States could claim a 20% reduction in VOC emissions from the AIM coatings category in ROP and attainment plans based on the anticipated promulgation of a national AIM coatings rule. In developing the attainment and ROP SIPs for their nonattainment areas, States relied on this memorandum to estimate emission reductions from the anticipated national AIM rule. EPA promulgated the final AIM rule in September 1998, codified at 40 CFR part 59 subpart D. In the preamble to EPA's final AIM coatings regulation, EPA estimated that the regulation will result in 20% reduction of nationwide VOC emissions from AIM coatings categories (63 FR 48855). The estimated VOC reductions from the final AIM rule resulted in the same level as those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, States have assumed a 20% reduction from AIM coatings source categories in their attainment and ROP plans. AIM coatings manufacturers were required to be in compliance with the final regulation within one year of promulgation, except for certain pesticide formulations which were given an additional year to comply. Thus all manufacturers were required to comply, at the latest, by September

¹⁴ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rules," March 22, 1995, from John S. Seitz, Director, Office of Air Quality Planning and Standards to Air Division Directors, Regions I-X.

2000. Industry confirmed in comments on the proposed AIM rule that 12 months between the issuance of the final rule and the compliance deadline would be sufficient to "use up existing label stock" and "adjust inventories" to conform to the rule. 63 FR 48848 (September 11, 1998). In addition, EPA determined that, after the compliance date, the volume of nonconforming products would be very low (less than one percent) and would be withdrawn from retail shelves anyway. Therefore, EPA believes that compliant coatings were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

Autobody Refinish Coatings Rule: Consistent with a November 27, 1994 EPA policy,¹⁵ many States have claimed a 37% reduction from this source category based on a proposed rule. However, EPA's final rule, "National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings," published on September 11, 1998 (63 FR 48806), did not regulate lacquer topcoats and will result in a smaller emission reduction of around 33% overall nationwide. The 37% emission reduction from EPA's proposed rule was an estimate of the total nationwide emission reduction. Since this number is an overall national average, the actual reduction achieved in any particular area could vary depending on the level of control which already existed in the area. For example, in California the reduction from the national rule is zero because California's rules are more stringent than the national rule. In the proposed rule, the estimated percentage reduction for areas that were unregulated before the national rule was about 40%. However as a result of the lacquer topcoat exemption added between proposal and final rule, the reduction is now estimated to be 36% for previously unregulated areas. Both the District and Virginia claimed 35.7% credit in their attainment and ROP plans while Maryland claimed 45%. EPA's best estimate of the reduction potential of the final rule was spelled out in a September 19, 1996 memorandum entitled "Emissions Calculations for the Automobile Refinish Coatings Final Rule" from Mark Morris to Docket No. A-95-18. The basis for approving Maryland's reductions is dealt with in a response to a separate comment

Consumer Products Rule: Consistent with a June 22, 1995 EPA guidance,¹⁶ States have claimed a 20% reduction from this source category based on EPA's proposed rule. The final rule, "National Volatile Organic Compound Emission Standards for Consumer Products," (63 FR 48819), published on September 11, 1998, has resulted in a 20% reduction after the December 10, 1998 compliance date. In the consumer products rule, EPA determined and the consumer products industry concurred, that a significant proportion of subject products have been reformulated in response to State regulations and in anticipation of the final rule. 63 FR 48819. That is, industry reformulated the products covered by the consumer products rule in advance of the final rule. Therefore, EPA believes that complying products in accordance with the rule were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

K. Enforcement of Control Programs

Comment: The attainment demonstrations do not clearly set out programs for enforcement of the various control strategies relied on for emission reduction credit.

Response: State enforcement program elements are contained in SIP revisions previously approved by EPA under obligations for enforceable emission limitations set out in section 110 of the Clean Air Act. Once approved by the EPA, there is no need for states to readopt and resubmit their enforcement programs with each and every SIP revision generally required by other sections of the Act.

L. Contingency Measures

Comment: The SIPs for the Metropolitan Washington, D.C. ozone nonattainment area do not provide contingency measures to make up for any emission reduction shortfall, either in achievement of ROP milestones or for failure to attain, as required by sections 172(c)(9) and 182(c)(9) of the Clean Air Act. The lawn/garden control measure that is included in the SIP for the District of Columbia and indicated as sufficient for a contingency measure is not currently legally enforceable, is only episodic in nature, and would not be adopted until 18 months after notice of a milestone failure.

Response: The EPA believes the contingency measure requirements of

sections 172(c)(9) and 182(c)(9) are independent requirements from the attainment demonstration requirements under sections 172(c)(1) and 182(c)(2)(A) and the rate-of-progress (ROP) requirements under sections 172(c)(2) and 182(c)(2)(B). The contingency measure requirements are to address the event that an area fails to meet a ROP milestone or fails to attain the ozone NAAQS by the attainment date established in the SIP. The contingency measure requirements have no bearing on whether a state has submitted a SIP that projects attainment of the ozone NAAQS or the required ROP reductions toward attainment. The attainment or ROP SIP provides a demonstration that attainment or ROP requirements ought to be fulfilled, but the contingency measure SIP requirements concern what is to happen only if attainment or ROP is not actually achieved. The EPA acknowledges that contingency measures are an independently required SIP revision, but does not believe that submission of contingency measures is necessary before EPA may approve an attainment or ROP SIP. Also see the discussion of contingency measures in the extension of the attainment date policy section.

The EPA has, however, examined the ROP and attainment SIPs for the Washington, D.C. nonattainment area.

The Post 1996 ROP and attainment demonstration SIPs for the Washington, D.C. area do not specify any specific measures as contingency measures. The EPA is approving the nonattainment demonstration and ROP plans today. (The plans pertain to the District and portions of the Commonwealth of Virginia and State of Maryland.) Approval of the plans without contingency measures is appropriate as stated above. Furthermore, the EPA notes that there are emission reductions not relied on or credited in the ROP plan accruing from the January 1, 2000, implementation of phase 2 of the reformulated gasoline program, NO_x reductions beyond RACT, and other on-road measures, such as NLEV, and a variety of off-road national emissions reduction programs. These measures will continue to provide reductions after 1999. The additional NO_x controls and reformulated gasoline measures alone are estimated to reduce emissions in the area by 1.7 percent of the VOC base line emissions and 10.5 percent of the NO_x base line emissions by May 2001. Thus, the SIP contains approved measures consistent with the contingency requirement.

Additionally, the EPA notes that there are emissions reductions not relied on or credited in the attainment

¹⁵ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rule and the Autobody Refinishing Rule," November 27, 1994, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

¹⁶ "Regulatory Schedule for Consumer and Commercial Products under Section 183(e) of the Clean Air Act," June 22, 1995, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

demonstration SIP accruing from the EPA's Tier II tailpipe standards and off-road national emission reduction measures. These measures will continue to provide reductions after November 2005, the attainment date that EPA is approving for the area. The measures are estimated to reduce emissions in the area by 2.5 percent of the VOC base line emissions and 1.7 percent of the NO_x base line emissions by May 2007 (the year following the time by which EPA must determine whether the area has attained). More details on EPA's contingency measure analysis are included in the docket for the rulemaking action. While there is not an approved SIP contingency measure that would apply if the Washington, D.C. area failed to attain, EPA believes that existing federally enforceable measures would provide the necessary substantive relief.

The EPA agrees with the commenter that the lawn/garden measure is insufficient as a contingency measure. However, the measure is not critical to meeting the contingency obligation in view of the reductions generated by the other emission control measures noted above.

M. Rate of Progress—NO_x Substitution

Comment: We received comments that assert the 9% demonstration assumes that a 1% reduction in NO_x emissions is equivalent in ozone reducing benefit to a 1% reduction in VOC emissions. The commenters assert that EPA's NO_x Substitution Guidance (December 1993) is flawed under section 182(c)(2)(C) of the Clean Air Act because it allows NO_x substitution without a demonstration that such substitution will in fact provide ozone reductions at least equivalent to that which would result from a 3% annual cut in VOC emissions. The commenters claim that such a demonstration requires photochemical grid modeling showing equivalency and that EPA's own guidance (*Guidance on the Post-1996 Rate-of-Progress Plan and Attainment Demonstration* (corrected version as of 2/18/94)) requires such modeling. The states cannot use a 1% NO_x for 1% VOC substitution without proving that a 1% NO_x cut will in fact provide ozone reductions at least equivalent to that resulting from a 1% VOC cut.

The commenters further assert that more recent EPA guidance dated January 10, 2000 for NO_x substitution in out-year conformity budgets requires 1.6 tons in NO_x reductions to offset 1 ton of VOC reductions. The commenters do not disavow their other comments that the states must prove the validity of

their NO_x substitution ratios as discussed in the summary of their comments in the preceding paragraph but they claim the 9% demonstration fail to use the ratio of 1.6 to 1 required by the more recent EPA guidance.

Additionally, the commenters assert that substitutions should not be allowed because the plan does not demonstrate timely attainment.

Response:

1. NO_x Substitution in General

The EPA believes States have the opportunity to substitute NO_x reductions for required VOC reductions under certain circumstances. The opportunity for NO_x substitution originates in section 182(c)(2)(C) of the CAA which specifically allows NO_x emissions reductions to be substituted for VOC reductions required under section 182(c)(2)(B) for reasonable further progress (RFP) also called rate-of-progress (ROP).

EPA issued guidance to the States on how to implement the NO_x substitution provisions for the post-1996 ROP plans in 1993 (Memorandum of December 15, 1993, from John S. Seitz re: "Transmittal of NO_x Substitution Guidance"). The guidance allows States to substitute NO_x emission reductions for VOC emission reductions if such substitution is consistent with the modeled attainment demonstration in the SIP. The modeled attainment demonstration in the SIP establishes the overall reductions of VOC and/or NO_x reductions required for attainment in the attainment year. The rate of progress plan is basically a tool to phase in emission reductions between the time the plan is prepared and the attainment date. To substitute NO_x for VOC in post-1996 ROP's, care must be taken to not substitute so much NO_x such that the attainment demonstration is no longer valid. At the extreme case, in an area for which the attainment demonstration that relies totally on VOC emission reductions, it would be inconsistent to substitute NO_x for VOC.

The NO_x substitution guidance allows substitution on a percentage basis (*i.e.*, one percent of NO_x emissions reductions for one percent of VOC emissions reductions) and does not require additional analysis of whether the ozone reduced from the NO_x emission reductions is equivalent to that which would result from the foregone VOC emission reductions.

It should be noted also that EPA's "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not

Modeled",¹⁷ references EPA's NO_x substitution guidance for purposes of substitution of NO_x reduction for additional VOC emission reductions identified as needed for attainment.

2. Technical and Practical Reasons for NO_x Substitution Guidance

The modeling performed for attainment demonstration basically establishes the relationship between emission reductions—either of VOC, NO_x, or both—and ozone reductions. This relationship is established for the attainment year. As noted above, the modeled attainment demonstration establishes the overall VOC and/or NO_x emission targets that are consistent with attainment of the standard at the attainment year. When EPA determines that an attainment demonstration is approvable, *i.e.*, will likely demonstrate attainment for the relevant areas, it is making an implicit corollary conclusion that the mix of VOC and/or NO_x control measures included in the area's attainment demonstration is adequate.

The ROP plan is then used to phase in emission reductions between the time of plan adoption and the attainment date. EPA does not require modeling of interim years for the purpose of trying to update the NO_x/VOC/ozone relationship for a number of reasons, including the following that are provided in the 1993 NO_x substitution guidance:

- a. The strong likelihood that optimum "exchange" rates vary from year to year and across a geographic area as an area's emissions distribution and atmospheric chemistry change over time;
- b. Uncertainty in modeling analyses, particularly when attempting to ascertain responses from small percentage perturbations in emissions; and
- c. Resource limitations associated with modeling specific control measures during interim years before attainment dates.

The EPA believes these are adequate reasons for maintaining this guidance for purposes of NO_x substitution under the ROP plan requirements.

In addition, the "Major Modeling/Air Quality Conclusions" from the Ozone Transport and Assessment Group (OTAG) effort, based on extensive photochemical grid modeling of the Eastern U.S. stated that regional NO_x reductions are effective in producing ozone benefits, and that the more NO_x

¹⁷ U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Emissions, Monitoring, and Analysis Division Air Quality Modeling Group Research Triangle Park, NC 27711. November 1999. Available at <http://www.epa.gov/ttn.scram/>.

reduced, the greater the benefit. [From: "Summary of Ozone Transport Assessment Group Recommendations to the U.S. Environmental Protection Agency as of June 20, 1997." Found at: <http://www.epa.gov/ttn/rto/otag/finalrpt/>.]

Recognizing that regional NO_x reductions are effective in producing ozone benefits, EPA further encouraged NO_x reductions by allowing States to credit certain regional NO_x emission reductions outside the nonattainment area for purposes of the ROP plan. See EPA's Interim Implementation Guidance. [Memorandum of December 29, 1997, from Richard D. Wilson re: "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM¹⁰ NAAQS."]

3. Legal Rationale for EPA NO_x Substitution Guidance

In addition, EPA still stands behind its legal rationale underlying the interpretation of "equivalency" that appears in the 1993 NO_x substitution guidance (see section 4 of that guidance). In that guidance, the basis for equivalency is the ability of a given control strategy (*i.e.*, any particular mix of NO_x and VOC emission reductions) to effect attainment of the ozone NAAQS by the designated attainment year (NO_x substitution guidance at page 2).¹⁸ Further, the NO_x emission reductions credited toward ROP may be limited to the amount of NO_x reductions required in the attainment demonstration; see the discussion and example above on this matter.

In allowing a combination of NO_x and VOC controls or the substitution of NO_x emissions reductions for VOC emissions reductions, Section 182(c)(2)(C) of the statute states that the resulting reductions "in ozone concentrations" must be "at least equivalent" to that which would result from the 3% VOC reductions required as a demonstration of RFP under Section 182(c)(2)(B). The

second sentence of Section 182(c)(2)(C) requires EPA to issue guidance "concerning the conditions under which NO_x control may be substituted for [or combined with] VOC control." In particular, the Agency is authorized to address in the guidance the appropriate amounts of VOC control and NO_x control needed, in combination, "in order to maximize the reduction in ozone air pollution." Further, the Act explicitly provides that the guidance may permit RFP demonstrations that allow a lower percentage of VOC emission reductions as long as compensating NO_x reductions are achieved. In light of the entire set of language and Congress's evident intent under this subsection to maximize the opportunity for ozone reductions, EPA believes that Section 182(c)(2)(C) confers on the Agency the discretion to select, for purposes of determining equivalent reductions, a percentage of NO_x emission reductions that is reasonably calculated to achieve both the ozone reduction and attainment progress goals intended by Congress.

As noted above, when EPA determines that an attainment demonstration is approvable, it is making an implicit corollary conclusion that the mix of VOC and/or NO_x control measures included in the area's attainment demonstration is adequate.

EPA disagrees with the comments that EPA's *Guidance on the Post-1996 Rate-of-Progress Plan and Attainment Demonstration* (corrected version as of 2/18/94) requires a different test than EPA's December 15, 1993 NO_x Substitution Guidance. In section 4.1 of the *Guidance on the Post-1996 Rate-of-Progress Plan and Attainment Demonstration*, EPA restated the equivalency test set forth in sections 2 and 3 of our December 1993 NO_x Substitution Guidance. With regard to the photochemical grid modeling, section 4.1 of the *Guidance on the Post-1996 Rate-of-Progress Plan and Attainment Demonstration* reads:

Section 182(c)(2)(C) states that actual NO_x emission reductions which occur after 1990 can be used to meet post-1996 emission reduction requirements, provided that such reductions meet the criteria outlined in EPA's December 15, 1993 NO_x Substitution Guidance. The condition for meeting the rate-of-progress requirement is that the sum of all creditable VOC and NO_x emission reductions must equal 3 percent per year averaged over each applicable milestone period. The percent VOC reduction is determined from the VOC rate-of-progress inventory and the percent NO_x reduction is determined

from the NO_x rate-of-progress inventory. In addition, the overall VOC and NO_x reductions must be consistent with the area's modeled attainment demonstration. In other words, the NO_x emission reductions creditable toward the rate-of-progress plan cannot be greater than the cumulative reductions dictated by the modeled attainment demonstration.

This portion of the 1994 guidance merely summarizes the guidance provided in our December 1993 NO_x Substitution Guidance. With regard to the photochemical grid modeling, section 2 of our December 1993 NO_x Substitution Guidance reads:

The provision for NO_x substitution recognizes that a VOC-only control pathway may not be the most effective approach for effecting attainment in all areas. Consequently, NO_x reductions are placed on a near equal footing with VOC through substitution. This document establishes two conditions pursuant to both the substitution and RFP provisions in the Act. The first condition requires that control strategies incorporating NO_x emission reduction measures must demonstrate that the ozone NAAQS will be attained within time periods mandated by the Act. This condition reflects the Title I provision for gridded photochemical model demonstrations (Section 182(c)).

The second condition, addressed below in Section 3, maintains the requirement for periodic emission reductions in order to realize progress toward attainment. Flexibility is introduced by allowing VOC and NO_x reductions rather than VOC reductions alone. A third condition exists in which the periodic emission reductions must be consistent with the model attainment demonstration.

In both cases, the guidance refers to the photochemical grid modeling that is necessary for the modeled attainment demonstration and that establishes the NO_x/VOC/ozone relationship at the attainment date. The NO_x substitution guidance does not require a modeled demonstration of equivalence for interim period for the reasons discussed above.

4. January 10, 2000, Guidance on Conformity Budgets in Out-Years

The January 10, 2000 guidance (Memorandum from G.T. Helms to Marcia Spink re: "Substitution of Nitrogen Oxide (NO_x) Emission Reduction in Out-Year Conformity Budgets") was developed to address a question related to development of an emissions budget for conformity purposes well beyond the attainment date of an area. Transportation planning cycles generally run beyond the attainment year, and a State may establish a budget for conformity

¹⁸This incidentally is consistent with the intended outcome of the NO_x substitution guidance document, which requires that substitution be done on the basis of percentage—a 1 percent reduction in NO_x from the 1990 ROP baseline adjusted to 1999 of 667.3 tons/day (6.67 tons/day) will thus likely produce a greater reduction in ozone than a 1 percent reduction in VOC from the 1990 ROP baseline adjusted to 1999 of 435.7 tons a day (4.36 tons/day). [Baseline emissions taken from memoranda of August 24, 2000, from Christopher Cripps, re: "Technical Support Document for the Approval of the Post-1996 Rate-of-Progress Plan for the District of Columbia portion of the Metropolitan Washington, DC Nonattainment Area (DC 035–2015, DC 044–2015)." and of October 13, 2000, from Janice Lewis, re: "Technical Support Document for Approval and Promulgation of Air Quality Implementation Plans; Maryland, and Virginia; Post-1996 Rate-of-Progress Plan for the Metropolitan Washington, DC Area (MD 058–3036 and VA 083–5038)."]

purposes in those out years beyond the attainment year if it desires and may substitute NO_x for VOC reductions in that out-year budget. The January 10, 2000 guidance refers to the methodology contained in "Guidance for Improving Weight of Evidence Through Identification of Additional Emissions Reductions, Not Modeled" (EPA, November 1999) and was not intended for use in ROP demonstrations; the methodology was developed for use in strengthening weight of evidence arguments for attainment demonstrations. The January 10, 2000 guidance contemplates use of this methodology for establishing conformity budgets for the out-years of an attainment demonstration, *i.e.*, the years after the attainment date for which there are no ROP requirements unless the area fails to attain as determined by the relevant air quality monitoring data. The guidance may result in NO_x substitution ratios of other than one-to-one, since it is based on the results of the modeled attainment demonstration. EPA's methodology for use in strengthening weight of evidence arguments for attainment demonstrations was intended to be used for calculating small amounts of emission reductions such that the overall NO_x/VOC/ozone relationship of the modeling used in the attainment demonstration would not be significantly altered. Likewise, the substitution of NO_x for VOC reductions for purposes of setting an emissions budget for conformity in the out-years beyond the attainment date would likely involve relatively small tons/day shifts in the ratio of NO_x to VOC. Thus EPA's methodology would be appropriate to use for this purpose. It should be noted that this methodology provides most reliable results when used with the best and most recent data.

Of course, any future emissions budget for a period years after the projected attainment year has uncertainty. If EPA subsequently finds that an area is not making sufficient progress toward attainment and its SIP is inadequate, or if ultimately the area does not attain the standard by its attainment date, the area will be required to revise its SIP. At that time, a new modeled attainment demonstration would be required, together with updated modeling that would re-establish a new NO_x/VOC/ozone relationship.

Furthermore, once an area attains the standard, the State may request redesignation to attainment. To obtain that redesignation, one requirement is that the State must submit an approvable air quality maintenance plan to ensure that the standard will be

maintained for at least a 10-year period. The maintenance plan will establish an out-year emission budget for conformity based on conditions at the time of attainment.

5. NO_x Substitution in Metropolitan Washington

Based on our review of all the information submitted in the attainment demonstration, it is the Agency's belief that the ozone reduction benefits achieved by application of NO_x controls is at least equivalent as that achieved by application of VOC controls.

The modeled attainment demonstration for the Metropolitan Washington, D.C. area calls for more NO_x and VOC emissions control than the 9 percent post-1996 ROP plan. The ROP plan relies on NO_x substitution, but the substitution rate is consistent with the attainment demonstration in that it does not provide any more NO_x reductions than called for in the attainment demonstration. The state's attainment demonstration is based upon local-scale photochemical grid modeling performed on the Baltimore-Washington Urban Airshed Modeling (UAM) domain and upon EPA's Regional Oxidant Modeling (ROM) results. Both EPA's ROM results and the photochemical grid modeling submitted with the attainment plan show that significant NO_x reductions will contribute to attainment in the area. The local UAM modeling also shows that NO_x reductions beyond those contained in the Post-1996 plan continue to provide reductions in ozone concentrations. The local photochemical grid modeling submitted with the attainment demonstration contains modeling results that further support the conclusion that on a ton for ton basis, NO_x reductions achieve at least equivalent changes in ozone concentrations as an equivalent reduction in VOC emissions.¹⁸

¹⁸ This incidentally is consistent with the intended outcome of the NO_x substitution guidance document, which requires that substitution be done on the basis of percentage—a 1 percent reduction in NO_x from the 1990 ROP baseline adjusted to 1999 of 667.3 tons/day (6.67 tons/day) will thus likely produce a greater reduction in ozone than a 1 percent reduction in VOC from the 1990 ROP baseline adjusted to 1999 of 435.7 tons a day (4.36 tons/day). [Baseline emissions taken from memoranda of August 24, 2000, from Christopher Cripps, re: "Technical Support Document for the Approval of the Post-1996 Rate-of-Progress Plan for the District of Columbia portion of the Metropolitan Washington, DC Nonattainment Area (DC 035–2015, DC 044–2015)." and of October 13, 2000, from Janice Lewis, re: "Technical Support Document for Approval and Promulgation of Air Quality Implementation Plans; Maryland, and Virginia; Post-1996 Rate-of-Progress Plan for the Metropolitan Washington, DC Area (MD 058–3036 and VA 083–5038)."]

Also, model sensitivity analysis demonstrates that the Metropolitan Washington portion of the Baltimore-Washington modeling domain benefits more from NO_x reductions than VOC reductions. See Attachment 4 ("Model Sensitivity Study for Metropolitan Washington Area") of the EPA document, "RACM Analysis for Four Serious Areas Designated Nonattainment for 1-hr Ozone NAAQS." U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; and Office of Transportation and Air Quality, Ann Arbor, MI 48105. October 12, 2000. An electronic version of EPA's RACM analysis cited above can be downloaded at www.epa.gov/ttn/rto under "What's New." This analysis does not contradict EPA's determination that a one percentage reduction of NO_x emissions will likely produce a greater reduction of ozone than a one percent reduction of VOC emissions.

EPA is determining that the attainment demonstration is approvable, *i.e.*, will likely demonstrate attainment for the Metropolitan Washington, D.C. area. Implicit in making this determination, is a corollary conclusion that the mix of VOC and/or NO_x control measures included in the area's attainment demonstrations is adequate. Based on review of all the information submitted in support of the attainment demonstration, it is the Agency's belief that the percentage of ozone reduction benefits achieved by application of NO_x controls, for both ozone reduction and attainment progress goals, is "at least equivalent" as that achieved by application of VOC controls. Both the NO_x and VOC controls are necessary if the area is to realize ozone reduction benefits and attain the NAAQS.

The commenter submitted a memorandum, dated January 13, 2000, from Joan Rohlf, Chief Air Quality Planning, Metropolitan Washington Council of Governments, to the Technical Advisory Committee, Metropolitan Washington Air Quality Committee, entitled "Calculating the NO_x Substitution Ratio for Out-Year Conformity Budget in the Washington Nonattainment Area", in which a 1.64 to 1 ratio was calculated for the Washington, D.C. area based upon the January 10, 2000 guidance. On March 22, 31, and 31, 2000, respectively, the District, Maryland and Virginia submitted a SIP revision with budgets for years after 2005 that used substitution at the 1.64:1 ratio. EPA has not yet taken rulemaking action on the portion of that submittal that deals with the out-year budgets. As noted above, the use of this 1.64:1 ratio, calculated

from the January 2000 guidance, is not applicable for purposes of the ROP plan.

6. Assertion of Metropolitan Washington Plan Fails To Demonstrate Attainment

EPA disagrees with the assertion that the attainment plan does not demonstrate attainment. The TSD and other documents in the docket support the conclusion that the area will attain. Further reasoning is also set forth in responses to other comments elsewhere in this notice.

N. NO_x Reduction Credits

Comment: We received comments that both the attainment and rate-of-progress (ROP) demonstrations are further flawed because they rely on emission reductions from control measures that have not been fully approved by EPA as part of the SIP. These measures include NO_x RACT rules for all three Metropolitan Washington, DC area states. The EPA cannot credit the SIP with NO_x reductions until the state adopts source specific RACT limits.

Response: The EPA recently signed a final action approving Maryland's, Virginia's and the District's RACT regulations all sources subject to RACT in the Metropolitan Washington, DC area. The action has been or will be published shortly in the **Federal Register**.

O. Attainment Demonstration and Rate of Progress

Comment 1: We received comments that assert that both the attainment demonstration and rate of progress plan for the Washington DC nonattainment area rely on emission reductions from control measures that have not been fully approved by EPA as part of the SIP.

Response 1: The EPA recently signed a final action fully approving the District's, Maryland's and Virginia's post-1996 ROP plan. These plans were credited with reductions from only those measures that have been fully approved into the SIP.

The EPA recently approved the District's, Maryland's and Virginia's NO_x RACT rules. Maryland's NO_x RACT rule has been amended since 1999. The District's final rule was amended since 1999. The EPA recently approved source specific emission limits for the major sources of NO_x in the Virginia portion of the Metropolitan Washington, DC area. The EPA recently signed a final action approving these rules. The action has been or will be published shortly in the **Federal Register**.

The EPA recently approved the District's and Maryland's NO_x reduction measures that require NO_x reductions from stationary sources beyond those required under RACT. The EPA recently signed a final action approving these rules. The action has been or will be published shortly in the **Federal Register**.

For purposes of the Metropolitan Washington, DC attainment demonstration, the EPA has not granted any reduction credits from Virginia's non-CTG VOC RACT rule except to the extent source-specific RACT limits or in the case of lithographic printing operations a category-specific RACT limits have been approved by EPA. [See 40 CFR 52.2520 (c)(128), and (c)(113)]. In addition, EPA recently approved a source specific RACT determination for another source subject to the 50 TPY non-CTG RACT for which Virginia takes no credit.

Comment 2: We received comments that state there are significant disparities between the projections of 1999 regional emissions found in the most recent 9% ROP plan for the Metropolitan DC area and the EPA's Technical Support Document for the attainment demonstrations. The commenter claims that lower emissions in the TSD for the December 16, 1999 NPR, should not be used unless EPA provides an adequate technical basis.

Response 2: A large part of the disparity is that the ROP plan does not take credit for all the measures implemented by 1999. However, those measures can be credited for attainment. Specifically, the ROP demonstration only requires the area to achieve a NO_x emissions level of 614.7 tons per day whereas attainment requires an emissions level of 538 tons per day. The States and the District have specifically identified beyond the RACT reductions at large point sources of NO_x that have not been counted towards the ROP demonstration. These reductions are quantified at 93 tons per day. Other control programs such as the surface cleaning and degreasing rules in Virginia and the Stage I reductions in Loudoun County, Virginia, resulted in emission reductions by 1999. However, Virginia elected not to claim credit for the surface cleaning rule in the final version of the Post-1996 plan (which EPA is approving), and the Stage I reductions are not creditable towards the 9% reduction requirement (because it is a RACT correction subject to the restrictions of section 182(b)(1)(D)). However, these measures are creditable for purposes of the attainment demonstration. EPA's approval of the attainment demonstration is based upon

the February 2000 amendments to the SIP. The SIP amendments show that in 2005, the area can achieve the emission levels less than the levels in the modeled demonstration of attainment. The SIP amendments account for growth in emissions from 1990 through 2005, as well as more recent planning assumptions and modeling assumptions used in the development of the mobile source emissions budgets. They also provide a reevaluation of the control measures.

P. Modeling Assumptions

Comment 1: We received comments saying that the (Transportation) model does not incorporate adequate assumptions about the effects of land development and new road projections on the growth of vehicle travel and citing to an EPA letter from Judith Katz, Director, Air Protection Division, EPA Region III to James Cheatham, Divisional Administrator, Federal Highway Administration dated August 27, 1998, in which the commenters assert that EPA stated that the plans did not include any information on the rate of land development in the Washington Region and the effect this development will have on the transportation system. The comments discuss the transportation model's land use assumptions, and imply that the Metropolitan Planning Organization (the Metropolitan Washington Council of Governments, MWCOC) (hereafter, "the MPO") has not included the effects of land use in the model and that EPA has known about this issue since 1998.

Response 1: This August 27, 1998, EPA letter to the MPO concerned EPA's review of the conformity determination on the FY99-04 Transportation Improvement program (TIP) as well as the Long Range Transportation Plan. Planning assumptions in a TIP must be derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other agency authorized to make such estimates and approved by the MPO. Likewise, the conformity rule, 40 CFR 93.118(e)(4)(ii), requires SIP motor vehicle emissions budgets to be developed in consultation with federal, state and local agencies such as the MPO in order to be adequate and approvable. Based on EPA reviews of the most recently approved Transportation Improvement programs (TIPs) as well as the Long Range Transportation Plans in the Washington, DC area, EPA is satisfied that the MPO through its land activity forecasts, provides timely information on growth and land use, through consultation with all of its regional county planners.

These same forecasts are used for both the development of SIP motor vehicle emissions budget as well as the determination that a TIP conforms. Therefore, while the estimates of land use activity are not done by modeling, their process of estimating land use activity does not violate the requirements of the conformity rule which was the context in which this August 27, 1998 letter was sent, and therefore EPA can find no reason to agree with any assertion or implication that the transportation model, used by the MPO to develop any SIP budgets in 1999 or 2005, is deficient. Furthermore, this August 27, 1998, EPA letter to the MPO does not have any relevance in this instance because the letter targets the lack of any clear graphic display of information in the transportation plans rather than the absence of information for the transportation model to use.

Comment 2: We have received comments saying that the temperature assumed in the mobile source modeling inputs was 93 degrees (Fahrenheit), yet the maximum recorded temperatures for those days during which peak ozone values in the 1999 ozone season were recorded were higher (96 to 98 degrees).

Response 2: EPA disagrees with the comment that this is a reason to determine that the budgets are not approvable. EPA guidance on projecting all future mobile source emissions inventories requires the States to use the temperatures representative of a "typical ozone season day". See section 3.3.5.2 of *Procedures for Emission Inventory Preparation Volume IV: Mobile Sources*, EPA-450/4-81-026d (Revised), 1992 which also sets the procedure for determining the temperature for the 1990 base year and all subsequent projection inventories. The typical ozone season day conditions are those used when determining the typical daily emissions for the 1990 base year emissions inventory. For 1990 inventories, the period to be used for temperature determination was 1988-1990. The same typical season day is also used when setting target levels of emissions in ROP plans and all future year projection inventories in ROP plans and attainment demonstrations. EPA believes it is reasonable to use these typical ozone season day temperatures rather than actual future year temperatures in projecting future emissions since these projections are made in advance when actual temperatures cannot be known.

Q. NO_x RACT Size Cutoff

Comment: All of the States should extend NO_x RACT to 25 ton per year sources. In addition, the SIP must

require Virginia to extend VOC RACT to 25 ton per year sources, like Maryland.

Response: The Clean Air Act does not require that serious areas extend NO_x or VOC RACT to 25 tons per year sources within serious classifications. Virginia's approved SIP has extended VOC RACT to 25 ton per year sources in the Washington, DC area. In addition, in section II. E. discussing RACM, EPA has determined that Maryland, Virginia and the District have met the RACM requirements.

R. NO_x Reduction Credits

Comment: We received comments that both the attainment and rate-of-progress (ROP) demonstrations are further flawed because they rely on emission reductions from control measures that have not been fully approved by EPA as part of the SIP. These measures include NO_x RACT rules for all three Metropolitan Washington, DC area states. EPA cannot credit the SIP with NO_x reductions until the state adopts source specific RACT limits.

Response: EPA has approved SIP revisions for all sources subject to RACT in the Metropolitan Washington, DC area subject to Maryland's, Virginia's and the District's RACT regulations. On December 14, 2000, the Regional Administrator signed a final action approving the District's NO_x RACT rule. That action has been or will be published shortly in the **Federal Register**. On December 15, 2000, the Regional Administrator signed final actions approving Maryland's and Virginia's NO_x RACT rules. The Virginia final approval also included RACT determinations for Non-CTG major VOC sources. These actions have been or will be published shortly in the **Federal Register**.

S. Control Measures

Comment 1: We received comments claiming that the states have failed to submit lists of potential control measures by December 31, 1999 as required by EPA's condition. The comments state that the states submitted commitments to adopt additional control measures if needed, but did not provide lists from which those measures would be chosen and further state that because the states have failed to meet a condition that EPA itself set as a prerequisite for plan approval, EPA must disapprove the Washington area SIP.

Response 1: The list of control measures is related only to the adequacy determination of the attainment year budgets. The States have now adopted all regulations on which they rely for

attainment. In section I.C.5 of the proposed rulemaking we stated:

"For purposes of conformity, if the states submitted a commitment, which has been subject to public hearing, to adopt the control measures necessary for attainment and ROP through the area's attainment date in conformance with the December 1997 Wilson policy, the State will not need an additional commitment at this time. However, the states will need to amend its commitment by letter to provide two things concerning the additional measures.

First, the State will need to identify a list of potential control measures (from which a set of measures could be selected) that when implemented, would be expected to provide sufficient additional emission reductions to meet the level of reductions that EPA has identified as necessary for attainment. States need not commit to adopt any specific measures on their list at this time, but if they do not do so, they must identify sufficient additional emission reductions to attain the standard with the submitted motor vehicle emissions budget. These measures may not involve additional limits on highway construction beyond those that could be imposed under the submitted motor vehicle emissions budget." (64 FR at 70467, December 16, 1999).

Likewise in Table 2 of section I.D. the list of measures was tied to the making of a finding of adequacy that the motor vehicle emissions budgets are consistent with attainment.

Elsewhere, in section I.C.3 the December 16, 1999 NPR we spelled out the importance of making an adequacy finding by May 31, 2000:

Therefore, EPA is proposing, in the alternative, to disapprove the attainment demonstration SIPs for those nine areas if the States do not submit motor vehicle emissions budgets that EPA can find adequate by May 31, 2000.¹¹ In order for EPA to complete the adequacy process by the end of May, States should submit a budget no later than December 31, 1999.¹² If an area does not have a motor vehicle emissions budget that EPA can determine adequate for conformity purposes by May 31, 2000, EPA plans to take final action at that time disapproving in full or in part the area's attainment demonstration. (64 FR at 70465, December 16, 1999.) (Footnote 11 read as follows: For severe areas, EPA will determine the adequacy of the emissions budgets associated with the post-1999 ROP plans once the States submit the target calculations, which are due no later than December 2000. Footnote 12 read as follows: A final budget is preferred; but, if the State public hearing process is not yet complete, then the draft budget for public hearing may be submitted. The adequacy process generally takes at least 90 days. Therefore, in order for EPA to complete the adequacy process no later than the end of May, EPA must have by February 15, 2000, the final budget or a draft that is substantially similar to what the final budget will be. The State must submit the final budget by April 15, 2000.)

Through the adequacy process the public had an opportunity to comment on the lists of potential control measures. The states identified all the potential control measures in Tables A, 6-1 and 6-2 of the SIP revision submittals of the plan document entitled "State Implementation Plan (SIP) Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area"—dated February 3, 2000, by which the budgets were submitted by the District, Maryland and Virginia on February 16, 2000, February 14, 2000, and February 9, 2000, respectively. These tables identified a number of control measures most of which had been either promulgated by EPA, or adopted and submitted by the states as SIP revisions on February 3, 2000. Not all of the remaining measures are necessary to make the motor vehicle emissions budgets consistent with attainment. EPA made the requisite findings of adequacy (65 FR 36439, June 8, 2000).

Disapproving the SIP for the sole reason that the lists were not submitted by December 31, 1999, would place the states in a situation where the states would have no ability to remedy the disapproval because the States have adopted and EPA has approved all measures needed to make the motor vehicle emissions budgets approvable. EPA disagrees that the attainment demonstration SIPs should be disapproved because the states have failed to submit lists of potential control measures by December 31, 1999.

Comment 2: We received Comments that assert that both the attainment demonstration and rate of progress plan for the Washington D.C. nonattainment area rely on emission reductions from control measures that have not been fully approved by EPA as part of the SIP.

Response 2: Today, EPA is fully approving the District's, Maryland's and Virginia's post-1996 ROP plan. These plans were credited with reductions from only those measures that have been fully approved into the SIP.

In recent **Federal Register** notices, EPA has fully approved the District's, Maryland's and Virginia's NO_x RACT rules. Maryland's NO_x RACT rule has been amended since 1999. The District's final rule was amended since 1999. The EPA has approved source specific emission limits for the major sources of NO_x in the Virginia portion of the Metropolitan Washington, DC area.

In recent **Federal Register** notices, EPA has approved the District's and Maryland's NO_x reduction measures that require NO_x reductions from

stationary sources beyond those required under RACT.

For purposes of the Washington, DC attainment demonstration, the EPA has not granted any reduction credits from Virginia's non-CTG VOC RACT rule except to the extent source-specific RACT limits or in the case of lithographic printing operations a category-specific RACT limits have been approved by EPA. [See 40 CFR 52.2520(c)(128), and (c)(113)]. In addition, in a recent **Federal Register** notice, EPA has approved a source specific RACT determination for another source subject to the 50 TPY non-CTG RACT for which Virginia takes no credit. On December 15, 2000, the Regional Administrator signed final actions approving RACT for this source along with Virginia's NO_x RACT rules. This action has been or will be published shortly in the **Federal Register**. (The Virginia attainment plan also includes credits from a source that would have been subject to the 50 TPY non-CTG VOC RACT requirement but that shut-down in 1991.)

T. MOBILE6 and the Motor Vehicle Emissions Budgets (MVEBs)

Comment 1: One Commenter generally supports a policy of requiring motor vehicle emissions budgets to be recalculated when revised MOBILE models are released.

Response 2: The Phase II attainment demonstrations that rely on Tier 2 emission reduction credit contain commitments to revise the motor vehicle emissions budgets after MOBILE6 is released.

Comment 3: The revised budgets calculated using MOBILE6 will likely be submitted after the MOBILE5 budgets have already been approved. EPA's policy is that submitted SIPs may not replace approved SIPs.

Response 3: This is the reason that EPA proposed in the SNPR (65 FR 46383) that the approval of the MOBILE5 budgets for conformity purposes would last only until MOBILE6 budgets had been submitted and found adequate. In this way, the MOBILE6 budgets can apply for conformity purposes as soon as they are found adequate.

Comment 4: If a State submits additional control measures that affect the motor vehicle emissions budget but does not submit a revised motor vehicle emissions budget, EPA should not approve the attainment demonstration.

Response 4: EPA agrees. The motor vehicle emissions budgets in the Metropolitan Washington, DC area attainment demonstration reflect the

motor vehicle control measures in the attainment demonstration.

Comment 5: EPA should make it clear that the motor vehicle emissions budgets to be used for conformity purposes will be determined from the total motor vehicle emissions reductions required in the SIP, even if the SIP does not explicitly quantify a revised motor vehicle emissions budget.

Response 5: EPA will not approve SIPs without motor vehicle emissions budgets that are explicitly quantified for conformity purposes. The Metropolitan Washington, DC area attainment demonstration contains explicitly quantified motor vehicle emissions budgets which EPA has found adequate (64 FR 62196).

Comment 6: If a state fails to follow through on its commitment to submit the revised motor vehicle emissions budgets using MOBILE6, EPA could make a finding of failure to submit a portion of a SIP, which would trigger a sanctions clock under section 179.

Response 6: If a state fails to meet its commitment, EPA could make a finding of failure to implement the SIP, which would start a sanctions clock under section 179 of the Clean Air Act.

Comment 7: If the budgets recalculated using MOBILE6 are larger than the MOBILE5 budgets, then attainment should be demonstrated again.

Response 7: As EPA proposed in its December 16, 1999 notices, we will work with States on a case-by-case basis if the new emissions estimates raise issues about the sufficiency of the attainment demonstration.

Comment 8: If the MOBILE6 budgets are smaller than the MOBILE5 budgets, the difference between the budgets should not be available for reallocation to other sources unless air quality data show that the area is attaining, and a revised attainment demonstration is submitted that demonstrates that the increased emissions are consistent with attainment and maintenance. Similarly, the MOBILE5 budgets should not be retained (while MOBILE6 is being used for conformity demonstrations) unless the above conditions are met.

Response 8: EPA agrees that if recalculation using MOBILE6 shows lower motor vehicle emissions than MOBILE5, then these motor vehicle emission reductions cannot be reallocated to other sources or assigned to the motor vehicle emissions budget as a safety margin unless the area reassesses the analysis in its attainment demonstration and shows that it will still attain. In other words, the area must assess how its original attainment demonstration is impacted by using

MOBILE6 vs. MOBILE5 before it reallocates any apparent motor vehicle emission reductions resulting from the use of MOBILE6. However, if the state is not required to remodel with MOBILE6 because the attainment demonstration does not rely on Tier II reductions, the conformity rules do require the use of MOBILE6 for conformity after any established grace period even if the SIP is based on MOBILE5. The state is not required to revise the SIP merely because a new mobile model becomes available.

U. MOBILE6 Grace Period

Comment 1: We received a Comment on whether the grace period before MOBILE6 is required in conformity determinations will be consistent with the schedules for revising SIP motor vehicle emissions budgets ("budgets") within 1 or 2 years of MOBILE6's release. This Commenter was concerned that MOBILE6 could be required for conformity before new budgets were submitted based on MOBILE6.

Response 1: The MOBILE6 grace period for conformity determinations is a separate requirement that is not explicitly tied to EPA's SIP policy and approvals. However, it is important to note that the transportation conformity rule requires EPA to consider many factors in establishing the length of the grace period before MOBILE6 is required in conformity, including the degree of change in emissions models and scope of re-planning likely to be necessary by transportation agencies (40 CFR 93.111). The grace period must be between 3–24 months, and EPA understands that a longer grace period would allow some areas to better transition to new MOBILE6 budgets. EPA will be taking the 1–2 year period provided for in the SIP approvals into account in establishing an appropriate grace period for conformity.

Comment 2: One Commenter asked EPA to clarify in the final rule whether MOBILE6 will be required for conformity determinations once new MOBILE6 budgets are submitted and found adequate. The Commenter wanted clarification on the case where the MOBILE6 conformity grace period ends before new budgets are submitted based on MOBILE6. The Commenter thought that this situation could necessitate the use of the emission reduction tests (e.g., build/no-build test) for conformity analyses, instead of using the budgets based on MOBILE5b. The Commenter stated that using the build/no-build test instead of existing budgets that are based on MOBILE5b is less appropriate for air quality planning purposes.

Response 2: The transportation conformity rule requires adequate budgets to be used in regional emissions analysis, when they exist, regardless of what emissions model was used to establish the budgets. In the example highlighted by the Commenter, the MOBILE5b budgets would be required for conformity purposes if they were the only applicable budgets at the end of the MOBILE6 grace period. Thus, the conformity analysis would compare future reductions under a proposed transportation plan or TIP calculated with MOBILE6 against the SIP budgets developed with MOBILE5. This has always been required by the conformity rule once the grace period for a new model has passed. Once budgets have been established, the build/no-build test is no longer applicable. See 40 CFR 93.111 of the transportation conformity rule. During the grace period, areas should use the consultation process to address any future conformity impacts of using the new emissions model.

V. Two-Year Option To Revise the MVEBs

Comment: One Commenter did not prefer the additional option for a second year before the state has to revise the conformity budgets with MOBILE6, due to several concerns. The Commenter cited that the air agency did not select this option and had already submitted a commitment to revise the conformity budgets with MOBILE6.

Response: EPA proposed the additional option to provide further flexibility in managing MOBILE6 budget revisions. The supplemental proposal did not change the original option to revise budgets within one year of MOBILE6's release. State and local governments can continue to use the 1-year option, if desired, or submit a new commitment consistent with the alternative 2-year option.

W. RACM

Comment: The Phase II NO_x limits agreed to by OTC are also clearly RACM.

Response: With respect to the OTC MOU Phase II NO_x limits in the Metropolitan Washington, DC nonattainment area, Maryland and the District have adopted programs to implement the Phase II NO_x reduction in the OTC memorandum of understanding. EPA has approved these programs into Maryland's and the District's SIPs. Virginia was not a party to the OTC MOU. However, in permits approved into the Virginia SIP, Virginia has imposed beyond RACT requirements on two large point sources of NO_x in the Virginia portion of the

Metropolitan Washington nonattainment area. These permits impose limits of 0.15 pounds of NO_x per million BTU heat input on these two sources. Such limits go beyond the OTC Phase II limits. An analysis of whether these SIP approved measures is RACM for the area is moot, since the States and the District have adopted the Phase II NO_x limits (in the case of Maryland and the District of Columbia) or measures consistent with these limits (in the case of Virginia). There is additional discussion elsewhere of the RACM requirement in relationship to electric generating units.

X. Additional Comments on the Rate of Progress Plan

Comment 1: We received Comments that asserted EPA cannot act on the District's, Maryland's and Virginia's Post-1996 ROP plan in isolation because the Post-1996 ROP plan for the Washington area was developed using a regional approach. EPA cannot know whether these requirements are met unless it acts on all three plans simultaneously.

Response 1: The Comment is moot because EPA is concurrently approving the District's, Maryland's and Virginia's submittals the Post-1996 plan for the Metropolitan Washington, DC serious nonattainment area in one final action published in the **Federal Register**.

Comment 2: We received Comments that certain modeling cited by EPA's proposed approval do not show that a 1% reduction in NO_x emissions provides the same ozone reduction benefit as a 1% reduction in VOC emissions, and that these results address post-1999 conditions—not 1996–99 conditions, and that one cannot reliably extrapolate back from the modeled results to the reductions at issue in the 9% plan. The Comments also assert there must be photochemical grid modeling of the actual substitution being proposed "to determine the extent to which NO_x can be substituted for VOC. These Comments also note these model results themselves show that NO_x reductions sometimes actually lead to an increase in the number of cells exceeding the ozone standard.

Response 2: EPA proposed approval of the District's, Maryland's and Virginia's Post-1996 ROP plan for the Metropolitan Washington, DC area based upon the modeling results from the attainment demonstration and conformance of the NO_x substitution to EPA's December 1993 "NO_x Substitution Guidance" which was issued pursuant to section 182(c) of the Act. In the notice of proposed rulemakings EPA stated:

"EPA's guidance requires that the amount of substituted NO_x reductions in the Post-1996 plan be less than or equal to the amount of NO_x reductions needed to attain the national ozone standard. The amount of NO_x reductions needed for attainment must be demonstrated by photochemical grid modeling. The District's demonstration that the NO_x substitution is based upon local scale modeling performed on the Baltimore-Washington Urban Airshed Modeling (UAM) domain and upon EPA's Regional Oxidant Modeling (ROM) results. Both EPA's ROM results and the photochemical grid modeling submitted with the attainment plan show that significant NO_x reductions will contribute to attainment in the area."

[and,

"Post-1996 plan substitutes fewer NO_x reductions than assumed in the attainment plan modeling."

(See 65 FR at 58245 to 58246, September 28, 2000, and see 65 FR 62660 to 62661, October 19, 2000.)

In the TSDs for the proposed rulemaking actions, EPA compared the NO_x substitution in the Post-1996 plan to the NO_x reductions assumed in the attainment demonstration. EPA noted that the Post-1996 plan assumed less NO_x reduction than the photochemical grid modeling supporting the attainment demonstration or, when stated another way, the target level (*i.e.*, ROP allowable) of NO_x emissions is higher than the NO_x emissions allowed by the attainment demonstration modeling. See section III.C.3.b and 3.c of the TSDs for the proposed actions.

EPA does not believe that the presence of an ozone increase in four modeling grid cells on one episode day is sufficient cause to disapprove the Post-1996 plan on the grounds that NO_x reductions do not provide equivalent ozone concentration benefits. Under EPA's December 1993 NO_x Substitution Guidance, which is the basis for approving the Post-1996 plan, it is only necessary to show equivalency for one of the episodes selected for the attainment demonstration. This follows because the attainment strategy ultimately selected must show predicted ozone to be less than or equal to the standard for all selected episodes.

Comment 3: We received comments that assert that although the plan cites various rules and programs that have been adopted to reduce emissions, it does not demonstrate that actual compliance with the rules and implementation of necessary programs will be achieved by the deadline or that claimed emission reductions will be fully realized by that date. We received comments that assert that EPA can only credit these plans with reductions actually achieved by November 15,

1999. We also received general comments that the ROP plan cannot be approved because programs on which the area relies for ROP credit were not approved by EPA until after November 15, 1999, thus the programs were not federally enforceable during the 1996–99 ROP period. Comments concerning specific measures and EPA's responses are summarized separately. Finally, the commenters suggest that certain programs may not have achieved the level of reductions for which credit was taken in the ROP plan.

Response 3: An ROP SIP is a projection that the State has a SIP to achieve an emissions target based upon projections of future year activity. In other words, the ROP analysis is forward-looking. The CAA has other provisions that require a backward look at what were the actual emissions in an area during a milestone year and whether a milestone was met or not. Determination of actual emissions for a milestone year is the subject of the periodic inventory requirement of section 182(a)(3) and the requirements of section 182(g) concerns milestone compliance.

For approving ROP plans, EPA views implementation dates as the date sources are required to comply with rule. In general, when reviewing a SIP submission with enforceable regulations, EPA does not separately analyze whether sources are in fact complying with the adopted regulations. The Act provides relief against sources that fail to comply, such as enforcement action and penalties. See CAA 304. In addition, if EPA determines that a State is failing to require sources to comply with an approved plan, EPA may make a finding of failure to implement under section 179(a), which would trigger the possible imposition of sanctions.

Preparation of the Post-1996 ROP SIP for the Metropolitan Washington, DC area commenced prior to the start of calendar year 1999 and was formally adopted in April and submitted in May 1999. Thus, the ROP SIP prepared for the area was a forward-looking projection that the 9% ROP requirement for the three year period from November 1996 to November 1999 would occur. The rules relied on in the plan were required to be implemented prior to November 15, 1999.

EPA is not required to disapprove an area's SIP simply because EPA did not act on the SIP revision prior to the statutory timeframe for the reductions. If EPA disapproves a SIP, the area is subject to sanctions and EPA is required to promulgate a FIP. Sanctions will not be imposed (or will be lifted) and EPA will not be required to promulgate a FIP

(or the FIP can be replaced) if the State(s) submit a SIP that corrects the deficiency that was the basis for the disapproval and EPA approves the SIP. It would be impossible for a State to ever correct a disapproval based on EPA's failure to approve the SIP by an earlier date. Moreover, if EPA were to then promulgate a FIP, the FIP would not be federally enforceable during the compliance timeframe contemplated by the statute. For these reasons, EPA does not believe that it is precluded from approving the SIP simply because November 1999 has passed.

As provided below, EPA believes that the measures on which the Metropolitan Washington, DC area relied for credit in the post-1996 plan were scheduled to achieve the necessary reductions prior to November 1999. However, EPA notes that even if it had found that there was a shortfall in the plan, the best remedy at this juncture would be to allow credit for other measures that were not relied upon, but that achieved reductions prior to 1999. If sufficient actual reductions occurring by the milestone date did not exist, then Maryland, Virginia or the District could only get reductions after the milestone deadline because, at this point, the States do not have the ability to require additional reductions for a period that has already passed. The passing of the deadline would not relieve Maryland, Virginia or the District from the requirement to achieve the 9% reduction in emissions, but the 9% reduction needs to be achieved as expeditiously as practicable after November 15, 1999. Measures such as enhanced inspection and maintenance and National Low Emission Vehicle that accrue additional benefits over time as newer vehicles replace older vehicles or as additional vehicles are required to obtain repairs will generate additional reductions more expeditiously than new measures which must undergo adoption processes that must include public notice and comment periods and any required legislative review processes prior to SIP approval.¹⁹

Comment 4: We received comments that said reductions from the National Low Emission Vehicle (NLEV) program are not creditable because the District did not submit a SIP revision for the NLEV program and because the NLEV SIPs for Maryland and Virginia were not approved until after the November 15, 1999 milestone date. The comments also assert that emission reductions are

¹⁹ Or in the case of the Metropolitan Washington, DC area, the three-state opt-in into the reformulated gasoline program would also quickly produce emission reduction benefits from the commencement of the second phase of the program in January 1, 2000 without further rule adoption.

creditable toward the ROP requirement only to the extent that they have actually occurred by the November 15, 1999 milestone date. The comments state that if the ROP plan does not get sufficient creditable reductions then the plan cannot be approved.

Response 4: As provided above, EPA does not believe that it cannot approve ROP credit for the NLEV program simply because the NLEV program was not approved prior to November 1999. In addition, EPA disagrees with the comment that the NLEV program does not get sufficient creditable reductions.

The NLEV program is a federally-enforceable program. Unlike other federally enforced motor vehicle control programs, however, the NLEV program required an agreement from nine northeastern states and 23 manufacturers prior to its becoming enforceable. On March 9, 1998, EPA made a finding that the NLEV program was in effect. Nine northeastern states and 23 manufacturers had opted into this "voluntary"²⁰ clean car program and the opt-ins met the criteria set forth by EPA in its NLEV regulations (63 FR 926, January 7, 1998). As a result, starting in the northeastern states in model year 1999 and nationally in model year 2001, new cars and smaller light-duty trucks had to meet tailpipe standards that are more stringent than EPA could mandate prior to model year 2004. The phase-in of the NLEV vehicles began in the District, Maryland and Virginia (and the other northeastern states covered under the rule) commencing with the introduction of the model year 1999 vehicles during the fall of 1998.

The NLEV program required certain northeast states and the District to adopt certain regulations into their SIP. The scope of these regulations can be found in the NLEV final rule and associated docket. See 63 FR 926, January 7, 1998. EPA would concede that if the Maryland, Virginia or the District did not have a SIP-approved NLEV rule at this time then crediting of the reductions from the measure would require a definitive determination whether the NLEV reductions resulted from a rule promulgated by EPA or from a rule adopted into the SIP. However, the NLEV rule has been approved into the SIPs for the District, Maryland and Virginia thus negating any need for such a determination. The reductions from

this program that are relied on in the Metropolitan Washington, DC post-1996 ROP plan occurred prior to November 15, 1999, in accordance with the approved SIPs and, therefore, are creditable.

Comment 5: We received comments that EPA should not credit reductions from the District's NO_x RACT rule because (1) EPA has not yet approved the District's NO_x RACT rule and, therefore, it will not become federally enforceable until long after 11/15/99, and (2) the District has not shown actual implementation of NO_x RACT before 11/15/99 by major NO_x sources within the District.

Response 5: As provided above, EPA believes that there is no point in disapproving the Metropolitan Washington DC area Post-1996 ROP SIPs at this time on the basis that the District's NO_x RACT regulation was approved after November 15, 1999. Moreover, as provided above, it is sufficient that the District's NO_x RACT rule requires sources to comply prior to the November 15, 1999 date by which ROP must be achieved. The District does not need to demonstrate that sources have actually complied with its regulations. Affected sources were required to comply with the applicable emissions standards and requirements contained in the District's NO_x RACT regulation (20 DCMR Section 805) by May 31, 1995. On December 14, 2000, the Regional Administrator signed a final action approving the District's NO_x RACT rule. That action has been or will be published shortly.

Comment 6: The comments assert the NO_x RACT rules include inadequate emission control requirements for various source categories. With respect to Maryland and Virginia NO_x RACT rules, the commenter referenced comments submitted in response to EPA's proposed rulemaking actions on those SIPs. With respect to the District's NO_x RACT rule, the commenter says the District proposed to amend its rule to eliminate deficiencies precluding EPA approval.

Response 6: With respect to Maryland and Virginia NO_x RACT rules, EPA has provided responses to comments in the final rulemaking action on those SIPs. With respect to the District's NO_x RACT rule, the District did make several amendments to address several provisions regarding monitoring, operating practice standards for smaller emission units, and applicability provisions that would only increase the number of sources and hence reductions available after 1999.

Comment 7: We received comments that assert that EPA cannot credit

reductions because the District has not implemented its NO_x RACT rules. Specifically, the comments cite that the District's proposed title V permit for the Blue Plains Wastewater Treatment Plant contains no NO_x RACT requirements (either as federal or state-only requirements), even though the District has identified the Plant as a major NO_x source.

Response 7: As an initial matter, EPA notes that the District has not taken credit in its ROP plan for NO_x RACT reductions attributable to the Blue Plains Wastewater Treatment Plant and, as provided below, believes that this source is not subject to the NO_x RACT requirement. (EPA notes that no comments regarding the Blue Plains Plant were received during the comment period on EPA's proposed full approval of the District's NO_x RACT rule.) Sources subject to the District's NO_x RACT rule were required to comply with the applicable emissions standards and requirements contained in the District's NO_x RACT regulation (20 DCMR Section 805) by May 31, 1995. Over the past several years, the District has been incorporating source-specific NO_x RACT requirements in Title V permits for many sources.

EPA has reviewed a draft operating permit for the Blue Plains Plant. The Blue Plains Plant has twenty-nine combustion sources. This includes five digester gas/number two fuel oil-fired boilers between ten and thirteen and one-half million BTU per hour heat input, nine natural gas/number 2 fuel oil-fired boilers between five and ten million BTU per hour heat input, seven distillate/natural gas fired boilers less than five million BTU per hour heat input, two oil-fired generators and six flares. The requirements in the permit limit the hours of operation of the emergency generators to less than 500 hours per year consistent with section 805.1(c) of the District's NO_x RACT rule, thus excluding the generators from coverage by the NO_x RACT rule.

The District's NO_x RACT rule sets differing level of control on boilers through emission limitations or good operating practices, depending upon the rated capacity and fuel type of the boiler. A source generally consists of several units which emit pollutants to the atmosphere. The sum of emissions from all units at a facility determines if a unit is major and, thus, subject to the RACT requirements. However, certain units at a facility may be so small that it is clear that no controls are reasonably available for those units, although RACT might apply at the other units within the facility. Regulatory agencies have typically included exemptions for very

²⁰ The NLEV program was "voluntary" in that it could only come into effect if agreed upon by the northeastern states and the auto manufacturers. As of March 2, 1998, the NLEV standards were enforceable in the same manner as any other federal new motor vehicle program (63 FR at 11375, March 9, 1998).

small emission units in their VOC RACT rules. The reason for the exemptions is that control requirements at very small units are generally not reasonable, considering technological and economic feasibility. As a result of the new NO_x RACT requirements in the Clean Air Act Amendments of 1990, regulatory agencies are required to develop and adopt NO_x RACT rules. In the process of drafting these rules, many agencies have included exemptions for very small NO_x emission sources for the same reason noted above for VOC rules. Unlike the VOC rules, however, there is no well-established precedent with respect to NO_x.

The District's NO_x RACT was approved without emission limits for de minimis sources. In the case of the boilers at the Blue Plains Plant, EPA concludes these 29 units would be de minimis because the units are distillate-oil or digester/natural-gas fired and thus the emission reduction potential is small, control is not cost effective, and the actual emissions reported in the draft operating permit from the plant are small and thus the potential emission reductions are negligible. Most of the combustion units, such as the sixteen boiler units below ten-million BTU per hour, are below the threshold at which controls are cost effective, and those at or just over ten-million BTU per hour are on the threshold of cost effectiveness. See the memorandum entitled "De Minimis Values for NO_x RACT" G. T. Helms, Group Leader, Ozone Policy and Strategies Group (MD-15), to the Air Branch Chiefs, Regions I-X, dated January 1, 1995.

Comment 8: We received comments that assert that EPA should not credit reductions from Maryland's or Virginia's NO_x RACT rules for the following reasons: (1) EPA has not yet even approved these NO_x RACT rules; (2) even if the rules are approved prior to final action on the ROP plan, the approvals will not become federally enforceable until long after 11/15/99; and (3) Maryland and Virginia have not shown actual implementation of all RACT requirements before 11/15/99.

Response 8: As provided above, EPA believes that there is no point in disapproving the Metropolitan Washington DC Post-1996 ROP SIPs at this time on the basis that Virginia's and Maryland's NO_x RACT regulations were approved after November 15, 1999. Moreover, as provided above, it is sufficient that the States' NO_x RACT rules require sources to comply prior to the November 15, 1999 date by which ROP must be achieved. The States do not need to demonstrate that sources

have actually complied with its regulations.

The Commonwealth's EPA-approved RACT regulations, found at 9 VAC 5-40-300 and 310, require all sources for which the CAA requires RACT to be in compliance by the May 31, 1995 deadline specified in the CAA.²¹ Virginia has not extended the Act's compliance date for those major sources mandated to comply by May 31, 1995, and by approving the Commonwealth's case-by-case SIP revisions, EPA is not approving an extension of this deadline. To the extent that Virginia's consent agreements and permits require additional reductions beyond the mandated compliance deadline for meeting RACT, these requirements are not considered to be part of the RACT determinations.

EPA disagrees with the commenter that there are no compliance dates established for the RACT requirements. As explained previously, on July 11, 1995, the MDE submitted a revision to its SIP for the control of NO_x emissions from major sources. This submittal included revisions to regulation COMAR 26.11.09.01 and 26.11.09.08 which pertained to definitions and a generic NO_x RACT rule which required affected sources to either meet a presumptive NO_x emissions standard or to submit a case-by-case RACT proposal for approval by MDE. In all cases, under this regulation, RACT requirements were to have been met by no later than May 31, 1995. On June 22, 1999 (64 FR 33197), EPA granted conditional limited approval of this SIP revision. The condition imposed required that all case-by-case RACT determination be submitted as SIP revisions. On September 8, 2000, Maryland submitted a SIP revision. It consisted of a revised version of COMAR 26.11.09.08 which removed the generic RACT provisions and replaced them with source category specific RACT emission limitations. Maryland chose to do this to avoid the undue burden of submitting all the case-by-case RACT determinations as source-specific SIP revisions. The submittal of the September 8, 2000, SIP revision satisfies the conditions of EPA's June 22, 1999 conditional limited approval. Maryland first revised COMAR

²¹ Consistent with the Act, the Commonwealth's RACT regulations require facilities in the Northern Virginia Emissions Control Area which have a theoretical potential to emit of 50 tons per year (TPY) or greater of NO_x or VOCs to comply by May 31, 1995. To obtain additional emission reductions beyond those mandated by the Act, the Commonwealth also required VOC sources with a theoretical potential to emit 25 TPY or greater, but less than 50 TPY, to apply RACT. The Commonwealth set a compliance deadline for these sources of May 31, 1996.

26.11.09.08 on September 22, 1999 and further revised it on August 30, 2000. These revisions to COMAR 26.11.09.08 became effective in the State of Maryland on October 18, 1999, and September 18, 2000, respectively. Its provisions are to be complied with at all times and it provides no extension of the CAA mandated RACT compliance date of May 31, 1995.

EPA has fully approved Maryland's and Virginia's NO_x RACT rules. On December 15, 2000, the regional Administrator signed final actions approving the Maryland and Virginia NO_x RACT rules. These actions have been or will be published shortly.

Comment 9: We received comments that asserted that EPA can only credit those reductions that the District actually achieved as a result of enhanced vehicle inspection between April 1999 and November 15, 1999. The comments state that only a fraction of the fleet was tested between the April 1999 commencement of the enhanced I/M program and November 15, 1999.

Other comments likewise questioned whether full emission reductions credited from the Maryland and Virginia I/M programs actually occurred by 11/15/99. The latter comments assert that states must demonstrate full implementation including enhanced testing of the entire fleet. These comments also questioned whether the full emission reductions were credited to the enhanced I/M programs in Maryland and Virginia given that final SIP approval did not occur until late 1999.

All comments state if the ROP plan does not get sufficient creditable reductions by November 15, 1999, then the plan cannot be approved.

Response 9: EPA disagrees that the full fleet must be tested for a state to get the credit that they claim. I/M program benefits were determined using EPA's MOBILE5b emission factor model. The MOBILE5b emission factor model was designed to evaluate program benefits from annual and biennial programs and is quite capable of evaluating program benefits for a specified year that is year-one of a biennial program. The MOBILE5b model has inherent limitations in that it can only assume an I/M start date of January 1 and can only provide output for July 1 or January 1 for the year of evaluation. The States modeled an enhanced I/M start date of January 1 of the following years: 1998 for Maryland and Virginia and 1999 for the District. The Maryland enhanced program commenced in October 1997, the Virginia program commenced during May of 1998 and the District on April 26, 1999. All the programs have

now tested the amount of the fleet specified in the post-1996 ROP plan. EPA believes the estimated reductions from I/M needed for the post-96 ROP plans were achieved and surpassed by the end of May 2000, prior to the beginning of the ozone season. EPA believes that these reductions were achieved as expeditiously as practicable and that no other reasonable emissions control strategy would have allowed the District or Virginia or EPA to achieve these reductions sooner.

EPA believes that there is no point to disapprove Maryland's, Virginia's or the District's Post-1996 plan SIP at this time because of the date Maryland's, Virginia's or the District's I/M SIP regulation was approved. First the reductions claimed by Maryland, Virginia and the District have now occurred. Second, Maryland, Virginia or the District would have to remedy the deficiencies that lead to the disapproval. The comments suggest that the deficiency could arise from one of two deficiencies: first, the reductions did not occur by the required deadline or, two, the reductions did not arise from either a measure approved into the District's SIP or from a measure promulgated by EPA. In either case, a shortfall of creditable reductions would occur. Now that the milestone deadline has passed, Maryland's, Virginia's or the District's has limited ability to effectuate a remedy to a shortfall of creditable reductions that must occur by a date past. The passing of the deadline does not relieve Maryland, Virginia or the District from the requirement to achieve the 9% reduction in emissions, but the 9% reduction needs to be achieved as expeditiously as practicable after November 15, 1999. Maryland, Virginia or the District can only get creditable reductions from reductions that actually occurred by the milestone deadline by making such reductions, if any exist, creditable by incorporating such reductions into a SIP regulation that EPA approves. In such a situation, the SIP approval would occur after the deadline. If sufficient actual reductions occurring by the milestone date did not exist then Maryland, Virginia or the District could only get reductions after the milestone deadline. The Post-1996 ROP requirement would only be fulfilled if such additional reductions occurred as expeditiously as practicable. Measures such as I/M and NLEV that accrue additional benefits over time as newer vehicles replace older vehicles or as additional vehicles are required to obtain repairs will generate additional reductions more expeditiously than new measures which must undergo adoption

processes that must include public notice and comment periods and any required legislative review processes prior to SIP approval.

Comment 10: We received comments that assert because the final national rules for autobody refinishing, surface coatings and consumer products allow for exemptions or variances, EPA cannot grant any emission reduction credit at all because the Clean Air Act does not allow EPA to credit state or national measures with emission reductions when emission limits are subject to waiver at any time. The comments further assert that because the tonnage exceptions and exceedance fee provisions or variance provisions in the rules are not limited to a specific tonnage figure at all the rules place no cap on the use of these provisions and thus assert in the absence of such caps, EPA cannot rationally or lawfully grant emission reduction credit for these rules.

Response 10: The AIM rule (40 CFR 594.404) sets caps on the amount of the tonnage exemptions. The Economic Impact Analysis for the final rule evaluated the magnitude of lost emission reductions in considering the fee provision and found that the fee would result in a relatively minor adjustment in emission reductions, while providing considerable flexibility in the marketplace, thus reducing the number of products that withdraw from the market. The effect of the tonnage exemption and the exceedance fee on the estimated emission reduction was considered in derivation of the estimated emission reduction. The estimated reduction for the final rule was reduced by 2,350 tons to account for the exceedance and tonnage exemptions in the rule.

Not all variance requests were related to time extensions to reformulate products but also included time extensions to update product literature or labeling or date coding equipment. See 64 FR 16447, April 5, 1999. Most variances were submitted immediately after the rules became effective and the time extension requested have now run out. Region III has not received a variance request in over a year.

Comment 11: We received comments that assert that the proposed rulemakings used estimates from the proposed rulemaking for autobody refinishing, consumer products, and architectural and industrial maintenance coatings as a basis for approving the States' reduction claims.

Response 11: As stated in the TSDs for the proposed approvals of Maryland's, Virginia's and the District's post-1996 ROP plan, the 36% reduction

for autobody refinish coatings is based upon the final rule, and as stated in the preambles and associated dockets for the consumer products and architectural and industrial maintenance coatings final rules, these final rules are estimated to achieve a 20% reduction in affected source categories.

EPA's March 22, 1995 memorandum²² allowed states to claim a 20% reduction in VOC emissions from the AIM coatings category in ROP and attainment plans based on the anticipated promulgation of a national AIM coatings rule. In developing the attainment and ROP SIPs for their nonattainment areas, States relied on this memorandum to estimate emission reductions from the anticipated national AIM rule. EPA promulgated the final AIM rule in September 1998, codified at 40 CFR part 59 subpart D. In the preamble to EPA's final AIM coatings regulation, EPA estimated that the regulation will result in 20% reduction of nationwide VOC emissions from AIM coatings categories (63 FR 48855). The estimated VOC reductions from the final AIM rule resulted in the same level as those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, States have assumed a 20% reduction from AIM coatings source categories in its attainment and ROP plans.

Consistent with a November 27, 1994 EPA policy,²³ many States have claimed a 37% reduction from the autobody refinishing source category based on a proposed rule. However, EPA's final rule, "National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings," published on September 11, 1998 (63 FR 48806), did not regulate lacquer topcoats and will result in a smaller emission reduction of around 33% overall nationwide. The 37% emission reduction from EPA's proposed rule was an estimate of the total nationwide emission reduction. Since this number is an overall national average, the actual reduction achieved in any particular area could vary depending on the level of control which already existed in the area. For example, in California the reduction from the national rule is zero because California's rules are more

²² "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rules," March 22, 1995, from John S. Seitz, Director, Office of Air Quality Planning and Standards to Air Division Directors, Regions I-X

²³ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rule and the Autobody Refinishing Rule," November 27, 1994, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

stringent than the national rule. In the proposed rule, the estimated percentage reduction for areas that were unregulated before the national rule was about 40%. However as a result of the lacquer topcoat exemption added between proposal and final rule, the reduction is now estimated to be 36% for previously unregulated areas. Both the District and Virginia claimed 35.7% credit in their attainment and ROP plans while Maryland claimed 45%. EPA's best estimate of the reduction potential of the final rule was spelled out in a September 19, 1996 memorandum entitled "Emissions Calculations for the Automobile Refinish Coatings Final Rule" from Mark Morris to Docket No. A-95-18.

The basis for approving Maryland's reductions is dealt with in a response to a separate comment consistent with a June 22, 1995 EPA guidance,²⁴ States have claimed a 20% reduction from the consumer products source category based on EPA's proposed rule. The final rule, "National Volatile Organic Compound Emission Standards for Consumer Products," (63 FR 48819), published on September 11, 1998, has resulted in a 20% reduction after the December 10, 1998 compliance date. Therefore the reductions obtained by States for their attainment and ROP plans from the final national rule are consistent with credit which was claimed.

Comment 12: We received comments that state for the architectural and industrial maintenance (AIM) coatings rule, the limits on a number of coatings were changed between the proposal and final rule either directly, or by establishing new subcategories with higher VOC limits. The comments assert that the effects of these changes and other changes is not documented precisely how those changes justify the claimed emission reduction credit. The comments further state that EPA does not show how the effects of these were reflected in the final percentage reduction estimate EPA is allowing states to claim from the rule.

Response 12: The basis for the 20% reductions achieved by the final rule is documented in the rulemaking docket for the AIM coatings final rule in docket A-92-18, item number IV-B-2 as stated in appendix C to the TSDs for the rulemakings on Maryland's, Virginia's and the District's P attainment and Post-1996 ROP plans. The emission reduction and the baseline emissions

estimate for the final rule reflect changes due to new information as well as the decisions on some categories. These changes included:

(a) Addition of information on concrete curing and sealing compounds.

(b) Removal of acetone emissions from the inventory for industrial maintenance coatings and for traffic coatings and zone marking coatings.

(c) Adjustments to account for creation of new categories where EPA had the necessary information on coating volume and VOC content and we could determine if the category was included in the NPCA survey.

After all of the revisions were made, the revised estimate of baseline emissions was 6 percent higher than the estimate at proposal and the revised estimate of the emission reduction was 7 percent higher. Thus, it is not possible to assess the validity of the emission reduction estimate by a simple comparison of the VOC content limits for a few products.

EPA believes the 20% reduction identified in the final AIM rule was reasonable and EPA took final action on the attainment and Post-1996 ROP plans on that basis.

Comment 13: We received comments that assert the estimate of emission reductions from the autobody refinishing rule does not account for establishment of a separate category for multi-colored topcoats in the final rule—a category that has weaker limits than would have applied to the same topcoats under the proposed rule, and the comments assert EPA that has no data on the usage of multi-colored topcoats—data that is required in order to rationally estimate the expected emission reductions from the rule.

Response 13: EPA's best estimate of the reduction potential of the final rule was spelled out in a September 19, 1996 memorandum entitled "Emissions Calculations for the Automobile Refinish Coatings Final Rule" from Mark Morris to Docket No. A-95-18.

The basis for approving Maryland's reductions is dealt with in a response to a separate comment below.

Comment 14: We received comments that assert there is insufficient basis for granting full credit for AIM rule as of November 15, 1999 because EPA has failed to offer any facts or analyses showing that only compliant products were in use as of 11/15/99, and the late implementation deadline of September 12, 1999 virtually assures that this was not the case.

Response 14: As discussed in response to other comments, the estimated VOC reductions from the final AIM rule resulted in the same level as

those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, States have assumed a 20% reduction from AIM coatings source categories in its attainment and ROP plans. AIM coatings manufacturers were required to be in compliance with the final regulation within one year of promulgation, except for certain pesticide formulations which were given an additional year to comply. Thus all manufacturers were required to comply, at the latest, by September 2000.

EPA believes that there is no point to disapprove the Post-1996 plan SIPs at this time because the States have limited ability to effectuate a remedy to a shortfall of creditable reductions that must occur by a date past. The passing of the deadline does not relieve the States from the requirement to achieve the 9% reduction in emissions, but the 9% reduction needs to be achieved as expeditiously as practicable after November 15, 1999. The States can only get creditable reductions from permanent reductions that actually occurred by the milestone deadline by making such reductions, if any exist, creditable by incorporating such reductions into a SIP regulation that EPA approves. In such a situation, the SIP approval would occur after the deadline. If sufficient actual reductions occurring by the milestone date did not exist then the States could only get reductions after the milestone deadline. The Post-1996 ROP requirement would only be fulfilled if such additional reductions occurred as expeditiously as practicable. Measures such as AIM rule which are already promulgated would generate reductions more expeditiously than new measures which must undergo adoption processes that must include public notice and comment periods and any required legislative review processes prior to SIP approval.

In promulgating the final AIM rule in 1998, EPA considered the impact of the new rule on the affected industry and inventory. Industry confirmed in comments on the proposed AIM rule that 12 months between the issuance of the final rule and the compliance deadline would be sufficient to "use up existing label stock" and "adjust inventories" to conform to the rule (63 FR at 48867, September 11, 2000).

EPA believes the estimated reductions from AIM needed for the Post-96 ROP plans were achieved already. EPA believes that these reductions were achieved as expeditiously as practicable and that no other reasonable emissions control strategy would have allowed the

²⁴ "Regulatory Schedule for Consumer and Commercial Products under Section 183(e) of the Clean Air Act", June 22, 1995, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

States or EPA to achieve these reductions sooner.

Comment 15: We received comments claiming that one EPA analysis indicates some reductions from the AIM rule could be deferred to as late as 2002. The comments cite a Memorandum dated May 30, 2000 from Paul T. Wentworth, EPA, to Administrative Record on the Adequacy findings for the Motor Vehicle Emissions Budgets in the Revised Phase II Ozone Attainment Plans for the Metropolitan Washington, DC Ozone Nonattainment Area.

Response 15: The budgets at issue in the Memorandum dated May 30, 2000 from Paul T. Wentworth, EPA, to Administrative Record on the Adequacy findings for the Motor Vehicle Emissions Budgets in the Revised Phase II Ozone Attainment Plans for the Metropolitan Washington, DC Ozone Nonattainment Area were the 2005 budgets. The statement made in this document stated that the reductions from the AIM rule “* * * will occur by 2002 * * *”. The statement does not state EPA’s position that the reductions would not occur any sooner. For the reasons outlined in the TSDs for the proposed rulemaking actions, EPA believes the AIM reductions occurred by November 15, 1999.

Comment 16: We have received comments saying that the (Transportation) model does not incorporate adequate assumptions about the effects of land development and new road projections on the growth of vehicle travel and cites an EPA letter from Judith Katz, Director, Air Protection Division, EPA Region III to James Cheatham, Divisional Administrator, Federal Highway Administration dated August 27, 1998, in which the commenters assert that EPA stated that the plans did not include any information on the rate of land development in the Washington Region and the effect of this development will have on the transportation system. The comments discuss the transportation model’s land use assumptions, and imply that the Metropolitan Planning Organization (the Metropolitan Washington Council of Governments, MWCOC) (hereafter, “the MPO”) has not included the effects of land use in the model and that EPA has known about this issue since 1998.

Response 16: This August 27, 1998, EPA letter to the MPO concerned EPA’s review of the conformity determination FY99–04 Transportation Improvement program (TIP) as well as the Long Range Transportation Plan. Planning assumptions in a TIP must be derived from the estimates of current and future population, employment, travel, and

congestion most recently developed by the MPO or other agency authorized to make such estimates and approved by the MPO. Likewise, the conformity rule, 40 CFR 93.118(e)(4)(ii), requires SIP motor vehicle emissions budgets to be developed in consultation with federal, state and local agencies such as the MPO in order to be adequate and approvable. Based on EPA reviews of the most recently approved Transportation Improvement programs (TIPs) as well as the Long Range Transportation Plans in the Washington, DC area, EPA is satisfied that the MPO through its land activity forecasts, provides timely information on growth and land use, through consultation with all of its regional county planners. These same forecasts are used for both the development of SIP motor vehicle emissions budget and the determination of conformity TIP. Therefore, while the estimates of land use activity are not done by modeling, their process of estimating land use activity does not violate the requirements of the conformity rule which was the context in which the cited 1998 letter was sent, and therefore EPA can find no reason to agree with any assertion or implication that the transportation model, used by the MPO to develop any SIP budgets in 1999 or 2000, is deficient. Furthermore, this August 27, 1998, EPA letter to the MPO does not have any relevance in this instance because the letter targets the lack of any clear graphic display of information in the transportation plans rather than the absence of information for the transportation model to use.

Comment 17: We received comments that assert that EPA cannot credit the Post-1996 plan submitted by Virginia and Maryland with reductions from measures credited in the 15% plan and cannot count emission reductions to both the 15% and 9% reduction requirements, that is reductions from some measures are being counted towards both the 5% and 9% reduction requirements.

Response 17: EPA disagrees with this comment. Under EPA’s interpretation of the reasonable further progress (also called rate-of-progress (ROP)) requirements under section 182 of the CAA, the 15% reduction requirement and post-1996 reduction requirement (e.g., 9% by 1999) are not separate tabulations but rather the post-1996 requirement is in addition to the 15% requirement.

EPA has always interpreted the ROP requirement to be a requirement to lower an area’s emissions below a target level of emissions. See 57 FR at 13506, April 16, 1992. The 9% per post-1996 requirement (over the three year period

1996 to 1999) is in addition to 15% by 1996 requirement. See 57 FR at 13516. EPA continued this approach in guidance documents issued subsequent to April 16, 1992.

The target level for any milestone year is always calculated relative to the 1990 base year emissions in the area and results in a lower target level for each milestone year. The 15% target level of VOC emissions is the 1990 base year inventory adjusted to account for the effects on base year emissions of certain noncreditable programs under Clean Air Act section 182(b): (1) Certain mandated RACT and I/M rule corrections, if any; (2) certain mandated reductions in gasoline Reid vapor pressure (the so called “Phase II RVP” program) to occur in 1992; and (3) the federal motor vehicle control program in place as of 1990 (the so-called “Tier 0 FMVCP”). This adjusted VOC emissions inventory is reduced by 15% to arrive at the 15% plan target level.

Calculation of the VOC target level for the 1999 milestone year starts with the 15% plan target level and applies further decremental reductions. Part of the decrement is due to effects on base year emissions due to the Tier 0 FMVCP between 1996 and 1999 (which is not creditable towards the 9% per year post-1996 ROP requirement under the Act) and part due to application of the post-1996 9% requirement. Substituting NO_x reductions for VOC reductions only lessens the additional 9% VOC reduction requirement by 1999 to some lesser percentage, which is 1% in the case of the plan subject to this rulemaking action.

Under section 182(b) of the CAA, the ROP requirements are to be met accounting for growth in the area.

An emission reduction is the difference between two emission projections that differ only in the presence of the effects of a control strategy in one case and the absence in the other (often referred to the “uncontrolled” projected emissions). For the 15% ROP plan, the projection year is 1996 whereas for the Post-1996 ROP plan the year is 1999.

A demonstration of ROP for the 15% plan requires that the plan have enough reductions to reduce the 1996 projected uncontrolled emissions to less or equal to the 1996 target level. The Post-1996 ROP plan has to have enough VOC reductions to account for growth in VOC emissions between 1996 and 1999 and to make the VOC portion (when NO_x is substituted) of the 1996 to 1999 3% per year reduction requirement.

The Post-1996 plan for the Washington area projects all emissions in all categories to 1999 without new

controls from the 1990 base year level and then applies controls to determine 1999 reductions. (Any growth projections in uncontrolled emissions for 1996 to 1999 or any changes in reductions for 1996 to 1999 in the plan were the difference between the 1990 to 1999 projections and the 1990 to 1996 projections (from the 15% plan)). The Post-1996 ROP plans evaluate the effects of the various creditable control strategies in the plan on these uncontrolled emissions levels to determine the reductions in 1999 from the Post-1996 ROP plan. EPA is approving the Post-1996 ROP plans on the basis that there were sufficient projected reductions to reduce the 1999 projected uncontrolled emissions to less than or equal to the target level.

Some measures used for the 15% ROP demonstration may produce more reductions relative to projected 1999 uncontrolled emissions for the post-1996 plan than for the reductions relative to projected 1996 uncontrolled emissions the 15% plan because the source categories affected by the measures have higher uncontrolled emissions in the post-1996 period due to growth in emissions related activity. (Other measures produce the same reductions because the underlying emissions related activity are projected to remain steady.) Some measures namely the additional rules under the FMVCP promulgated since 1990 (*i.e.*, "Tier 1") produce greater reductions for a post-1996 plan than for the 15% plan for an additional reason than just growth in underlying emissions related activity: the post-1996 fleet contains a higher percentage of vehicles meeting the newer standards than the fleet assumed in the 15% plan.

Suppose a measure (implemented after 1990 but before 11/15/96) can reduce emissions in a sector (or at a source) by 20%. Suppose the 1990 base line emissions for that sector (or source) were 10.0 tons per day. Suppose the emissions in the category were projected to grow 1% per year or 6.2% between 1990 and 1996 and 9.4% between 1990 and 1999. The uncontrolled emissions would be 10.62 (10×1.062) tons per day for 1996 and 10.94 (10×1.094) tons per day for 1999. The 1996 reductions would be 2.12 tons per day (0.20×10.62), and the 1999 reductions would be 2.19 (0.20×10.94) tons per day.

A demonstration of ROP for the post-1996 plan requires that the plan have enough VOC reductions to reduce the 1999 projected uncontrolled emissions to less than or equal to the relevant post-1996 VOC target level.

In the Post-1996 ROP plan the measures used in the 15% plan are

evaluated as to how well these measures reduce projected uncontrolled 1999 emissions. These 1999 reductions were added up with the 1999 reductions from additional measures implemented after 11/15/96 to get the total emission reductions in 1999 (relative to the 1999 uncontrolled levels).

Thus although some measures may be included in both the 15% and 9% plans, only the reductions between 1990 and 1996 from those measures are counted towards the 15% plan, while those from 1996 to 1999 are counted in the 9% plan.

The comments do not offer any substantive alternative interpretation regarding the demonstration of ROP to that which EPA has issued in guidance on the subject except to claim once a measure has been used towards the 15% requirement it cannot be used towards the 9% requirement. Nor do the commenters comment adversely on EPA's interpretation regarding demonstration of ROP through calculation of target levels and through a showing that milestone year projected emission inventories with all controls are less than the target levels. As explained above, the measures used to achieve the 15% reduction requirement by 1996 were evaluated for the effect on uncontrolled 1999 emissions (that were projected from 1990). In the case of the Metropolitan Washington, D.C. nonattainment area additional measures are needed in the post-1996 plan to achieve additional reductions needed to offset growth in emissions after 1996 and to achieve the VOC portion of the 9% reduction requirement.

Comment 18: We received comments that assert that EPA must document its reasons for accepting Maryland's and Virginia's emission reduction claims. The comments cite the example of the reductions from Maryland's and Virginia's open burning program and the 45% reduction claimed by Maryland for the Maryland rules applicable to autobody refinishing. The comments state that the States assume an 80% compliance with the open burning regulations without documenting the basis for this assertion. The comments claim that the 80% compliance assertion is void in the absence of plans or commitments needed for local enforcement.

Response 18: In the case of Maryland's autobody refinishing rule, Maryland's rule requires coating limits equivalent to those required under EPA's proposed autobody refinishing rule. Maryland's rule also establishes VOC content requirements for surface preparation cleaners, equipment cleaning, and for application

equipment. The effect from the coating limits, surface preparation cleaners, and equipment cleaning would be a reduction of 42.5% based upon the analysis in EPA's Alternative Control Techniques: Auto Body Refinishing (EPA 453/R-94-031, April 1994). Maryland's rule also requires the use of either low-volume, high-pressure or high-volume, low-pressure application equipment. STAPPA reports that the Bay Area Air Quality Management District conservatively estimates that use of HVLP equipment can reduce coatings usage by 20 to 40% (STAPPA/ALAPCO, "Meeting the 15% Rate of Progress—A Menu of Options", pages 91-99 (Sept. 1993)). A 20% reduction in coatings usage would result in a further 12% reduction in coating emissions which equate to a further 10% reduction in overall emissions. Based upon this EPA believes the 45% reduction credit assumed by Maryland is appropriate and may be conservative.

Regarding open burning, 80% compliance is reasonable as a default compliance rate. This default 80% compliance assertion is based upon EPA's guidance for rule effectiveness. This guidance was among that listed in appendix A to the TSD for the proposed action (such as item numbers 4, 5, 6, 24, 27, 30, 35, 36, and 38 among others). EPA's guidance allows States to assume 80% compliance rate as a default. EPA views the fact that States take the default 80% rule effectiveness as a defacto commitment to invest enforcement resources to ensure this level of compliance.

Comment 19: We received comments that claimed open burning emissions were not in the 1990 base year emissions inventory for Maryland and Virginia. The comments assert that EPA cannot credit reductions from emissions that were not included in the 1990 base year emissions inventory.

Response 19: The emissions from the open burning category were documented in the 1990 base year emissions inventory. These were documented in Chapter 3.0, section 3.4.4.5.2 on pages 3-65 and 3-66, and on page III-32 of Appendix 3.0 of the "1990 Base Year Emissions Inventory for Stationary Anthropogenic, Biogenic and Highway Vehicle Emissions of Ozone Precursors in the Washington, DC-MD-VA Metropolitan Statistical Nonattainment Area", dated September 22, 1993, that was submitted by Maryland and Virginia as part of their 1990 base year emissions inventory SIP.

Comment 20: We received comments asserting that the Maryland and Virginia attainment and Post-1996 ROP plans are flawed because they assume a fleet mix

that does not accurately reflect the growing proportion of sport utility vehicles and gasoline trucks. The comments cite data from the Maryland Department of the Environment for 1996 and 1999. The comments further assert that EPA and the states have not followed a consistent practice in updating SIP modeling to account for changes in vehicle fleets. The comments also assert that EPA cannot rationally approve SIPs that are based on such materially inaccurate assumptions. The comments also assert continued use of out-dated assumptions is inconsistent with the duty imposed by Clean Air Act section 182(a)(3) to triennially update the emission inventory. The comments also assert that if the motor vehicle inventory has not been updated to prepare the current SIP submission, it should be disapproved.

Response 20: All of the SIPs on which we are taking final action are based on the most recent vehicle registration data available at the time the SIP was prepared. The SIPs use the same vehicle fleet characteristics that were used in the most recent periodic inventory update. The Metropolitan Washington D.C. Ozone Nonattainment Area SIP is based on vehicle registration data from 1996, which is the most recent data available at the time the SIP was prepared and submitted. Clearly the 1999 data could not have been used in motor vehicle emissions projections prepared in the fall of 1998 as documented in Appendix D of the SIP. EPA requires the most recent available data to be used, but we do not require it to be updated on a specific schedule. Therefore, different SIPs base their fleet mix on different years of data. Our guidance does not suggest that SIPs should be disapproved on this basis. Further, EPA does not require states to go back and reanalyze SIP submissions if new data becomes available shortly before EPA takes final action on the SIP. Nevertheless, we do expect that revisions to these SIPs that are submitted using MOBILE6 (as required in those cases where the SIP is relying on emissions reductions from the Tier 2 standards) will use updated vehicle registration data appropriate for use with MOBILE6, whether it is updated local data or the updated national default data that will be part of MOBILE6. EPA is requiring the Metropolitan Washington, D.C. area states to revise the attainment budgets using MOBILE6.

Comment 21: We received comments that assert that the Post-1996 ROP plan and the attainment plan fail to include a program to provide for the enforcement of the adopted control

measures as required by section 110(a)(2)(C) of the CAA. The comments assert that these plans must contain a legally enforceable SIP commitment to enforce the various control strategies relied upon for emission reduction credit. The comments assert that EPA review of state enforcement programs in connection with federal grantmaking does not satisfy EPA's duty to ensure that the SIP itself contains the legally required enforcement and funding commitments.

Response 21: EPA disagrees with the commenter's assertion that states must provide such information with each SIP revision. Although Clean Air Act sections 110(a)(2)(E) and 110(a)(2)(C) do contain these provisions cited by the commenter, section 110(a)(2)(H) is the statutory provision which governs requirements for individual plan revisions which States may be required to submit from time to time. There are no cross-references in section 7410(a)(2)(H) to either 7410(a)(2)(E) or 7410(a)(2)(C). Therefore, EPA concludes that Congress did not intend to require States to submit an analysis of adequate funding and enforcement with each subsequent and individual SIP revision submitted under the authority of section 110(a)(2)(H).

Once EPA approves a State's SIP as meeting section 110(a)(2), EPA is not required to reevaluate that SIP for each new revision to the plan to meet additional requirements in later sections of the Act. The Metropolitan Washington D.C. area States had previously received approval of their section 110(a)(2) SIPs.

In a final rulemaking action published on February 25, 1984 (49 FR 3063), EPA approved Virginia's financial and manpower resource commitments, after having proposed approval of these commitments on February 3, 1983 (48 FR 5124 at 5127).

In a final rulemaking action published on March 8, 1984 (49 FR 8610), EPA approved Maryland's financial and manpower resource commitments, after having proposed approval of these commitments on February 3, 1983 (48 FR 5048 at 5052).

In a final rulemaking action published on October 3, 1984 (49 FR 39059 at 39060), EPA approved the District's financial and manpower resource commitments, after having proposed approval of these commitments on December 17, 1983 (48 FR 54833 at 54836).

Neither this commenter or any other person has submitted substantive comments that would lead EPA to separately analyze whether it should call on the states to revise their section

110(a)(2) SIPs regarding enforcement and funding.

III. Final Action

A. The District of Columbia

1. Post-1996 ROP Plan

EPA is approving the District of Columbia's post-1996 (ROP) plan SIP revision for the Washington area which was submitted on November 3, 1997, and supplemented on May 25, 1999.

2. Attainment Demonstration

EPA is approving the District of Columbia's attainment demonstration SIP revision for the Washington area which was submitted on April 24, 1998, and supplemented on October 27, 1998, and on February 16, 2000, and section 9.1.1.2 of the March 22, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model.

3. Attainment Date Extension

EPA is approving the District of Columbia's request for an attainment date extension from November 15, 1999 to November 15, 2005, for the Washington area.

B. State of Maryland

1. Post-1996 Plan

EPA is approving the State of Maryland's post-1996 (ROP) plan SIP revision for the Washington area which was submitted on December 24, 1997, and supplemented on May 20, 1999, and the transportation control measures in Appendix H of the May 20, 1999 submittal.

2. Attainment Demonstration

EPA is approving the State of Maryland's attainment demonstration SIP revision for the Washington area which was submitted on April 29, 1998 and supplemented on August 17, 1998 and February 14, 2000, and only section 9.1.1.2 of the March 31, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model.

3. Attainment Date Extension

EPA is approving the State of Maryland's request for an attainment date extension from November 15, 1999 to November 15, 2005, for the Washington area.

C. Commonwealth of Virginia

1. Post -1996 Plan

EPA is approving the Commonwealth of Virginia's post-1996 (ROP) plan SIP revision for the Washington area which was submitted on December 19, 1997, and supplemented on May 25, 1999, and the transportation control measures in Appendix H of the May 25, 1999 submittal.

2. Attainment Demonstration

EPA is approving the Commonwealth of Virginia's attainment demonstration SIP revision for the Washington area which was submitted on April 29, 1998 and supplemented on August 18, 1998, and February 9, 2000, and only section 9.1.1.2 of the March 31, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model.

3. Attainment Date Extension

EPA is approving the Commonwealth of Virginia's request for an attainment date extension for the Washington area from November 15, 1999 to November 15, 2005.

IV. Administrative Requirements*A. General Requirements*

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in

Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 5, 2001. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action to approve the Post-1996 ROP plan, the ozone attainment demonstration and the attainment date extension SIP revisions submitted by the District, Maryland and Virginia may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: December 15, 2000.

Thomas C. Voltaggio,

Acting Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart J—DC

2. Section 52.475 is added to read as follows:

§ 52.475 Extensions.

The Administrator hereby approves a request to extend the attainment date for the national ambient air quality standards for ozone to November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area.

3. Section 52.476 is amended by designating the existing text as paragraph (a) and by adding paragraphs (b) and (c) to read as follows:

§ 52.476 Control strategy and rate-of-progress plan: ozone.

* * * * *

(b) EPA is approving the District of Columbia's post-1996 (ROP) plan SIP revision for the Washington area which was submitted on November 3, 1997, and supplemented on May 25, 1999.

(c) EPA approves the revisions to the State Implementation Plan submitted by the District of Columbia Department of

Health on April 24, 1998, October 27, 1998, and February 16, 2000, and only section 9.1.1.2 of the March 22, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model. The revisions are for the purpose of satisfying the attainment demonstration requirements of section 182(c)(2)(A) of the Clean Air Act for the Metropolitan Washington, DC serious ozone nonattainment area. The revision establishes an attainment date of November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area. This revision establishes motor vehicle emissions budgets for 2005 of 101.4 tons per day of volatile organic compounds (VOC) and 166.7 tons per day of nitrogen oxides (NO_x) to be used in transportation conformity in the Metropolitan Washington, DC. Serious ozone nonattainment area until revised budgets based upon the MOBILE6 model are submitted and found adequate. In the revision, the District of Columbia commits to revise their VOC and NO_x transportation conformity budgets within one year of the release of the MOBILE6 model. The District of Columbia also commits to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007, and submit the results to EPA by December 31, 2003.

Subpart V—MD

4. Section 52.1078 is added to read as follows:

§ 52.1078 Extensions.

The Administrator hereby approves a request to extend the attainment date for the national ambient air quality standards for ozone to November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area.

5. Section 52.1076 is amended by adding paragraphs (d) and (g) to read as follows:

§ 52.1076 Control strategy and rate-of-progress plan: ozone.

* * * * *

(d) EPA is approving the State of Maryland's post-1996 (ROP) plan SIP revision for the Washington area which

was submitted on December 24, 1997, and supplemented on May 20, 1999, and the transportation control measures in Appendix H of the May 20, 1999 submittal.

* * * * *

(g) EPA approves the revisions to the State Implementation Plan submitted by the Maryland Department of the Environment on April 29, 1998, August 17, 1998, and February 14, 2000, and only section 9.1.1.2 of the March 31, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model. The revisions are for the purpose of satisfying the attainment demonstration requirements of section 182(c)(2)(A) of the Clean Air Act for the Metropolitan Washington, DC serious ozone nonattainment area. The revision establishes an attainment date of November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area. This revision establishes motor vehicle emissions budgets for 2005 of 101.4 tons per day of volatile organic compounds (VOC) and 166.7 tons per day of nitrogen oxides (NO_x) to be used in transportation conformity in the Metropolitan Washington, DC. Serious ozone nonattainment area until revised budgets based upon the MOBILE6 model are submitted and found adequate. In the revision, Maryland commits to revise their VOC and NO_x transportation conformity budgets within one year of the release of the MOBILE6 model. Maryland also commits to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007, and submit the results to EPA by December 31, 2003.

Subpart VV—VA

6. Section 52.2429 is added to read as follows:

§ 52.2429 Extensions.

The Administrator hereby approves a request to extend the attainment date for the national ambient air quality standards for ozone to November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area.

7. Section 52.2428 is amended by adding paragraphs (c) and (d) to read as follows:

§ 52.2428 Control strategy and rate-of-progress plans: ozone.

* * * * *

(c) EPA is approving the Commonwealth of Virginia's post-1996 (ROP) plan SIP revision for the Washington area which was submitted on December 19, 1997, and supplemented on May 25, 1999, and the transportation control measures in Appendix H of the May 25, 1999 submittal.

(d) EPA approves the revisions to the State Implementation Plan submitted by the Virginia Department of Environmental Quality on April 29, 1998, August 18, 1998, and February 9, 2000, and only section 9.1.1.2 of the March 31, 2000 SIP supplement dealing with a commitment to revise the 2005 attainment motor vehicle emissions budgets within one-year of the EPA's release of the MOBILE6 model. The revisions are for the purpose of satisfying the attainment demonstration requirements of section 182(c)(2)(A) of the Clean Air Act for the Metropolitan Washington, DC serious ozone nonattainment area. The revision establishes an attainment date of November 15, 2005 for the Metropolitan Washington, DC ozone nonattainment area. This revision establishes motor vehicle emissions budgets for 2005 of 101.4 tons per day of volatile organic compounds (VOC) and 166.7 tons per day of nitrogen oxides (NO_x) to be used in transportation conformity in the Metropolitan Washington, DC. Serious ozone nonattainment area until revised budgets based upon the MOBILE6 model are submitted and found adequate. In the revision, Virginia commits to revise their VOC and NO_x transportation conformity budgets within one year of the release of the MOBILE6 model. Virginia also commits to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007, and submit the results to EPA by December 31, 2003.

[FR Doc. 01-61 Filed 1-2-00; 8:45 am]

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Federal Register

**Wednesday,
January 3, 2001**

Part VI

Environmental Protection Agency

40 CFR Part 52

**Approval and Promulgation of Air Quality
Implementation Plans; One-Hour Ozone
Attainment Demonstration and
Attainment Date Extension for the
Greater Connecticut Ozone Nonattainment
Area; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CT056-7215b; FRL-6924-5]

Approval and Promulgation of Air Quality Implementation Plans; Connecticut; One-Hour Ozone Attainment Demonstration and Attainment Date Extension for the Greater Connecticut Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revision submitted by the State of Connecticut. This action approves Connecticut's One-Hour Ozone Attainment Demonstration for the Greater Connecticut serious nonattainment area and extends the attainment date for this area until November 15, 2007. This approval of the attainment demonstration SIP establishes the 2007 volatile organic compound (VOC) and nitrogen oxide (NO_x) motor vehicle emissions budgets for the Greater Connecticut serious ozone nonattainment area for use in transportation conformity. A notice of proposed rule making was published on this action on December 16, 1999 (64 FR 70332). EPA received comments on that proposal as well as other supplemental proposals for this action. In this action, EPA responds to those comments.

EFFECTIVE DATE: This rule becomes effective on February 2, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection by appointment weekdays from 9 a.m. to 4 p.m. at the Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA—New England, One Congress Street, 11th floor, Boston, MA; Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, Room M-1500, 401 M Street (Mail Code 6102), S.W., Washington, DC; and the Bureau of Air Management, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, CT 06106-1630.

FOR FURTHER INFORMATION CONTACT: Richard P. Burkhart, (617) 918-1664.

SUPPLEMENTARY INFORMATION: This supplementary information section is organized as follows:

- I. What Connecticut SIP revision is the topic of this action?
- II. What previous action has been taken on this SIP revision?

- III. What are the requirements for full approval of the attainment demonstration?
- IV. How did Connecticut fulfill these requirements for full approval?
- V. What SIP elements did EPA need to take action on before full approval of the attainment demonstration could be granted?
- VI. What comments were received on the proposed approvals and how has EPA responded to those?
- VII. EPA action
- VIII. Administrative requirements

I. What Connecticut SIP Revision is the Topic of This Action?

An attainment demonstration SIP was submitted on September 16, 1998 by the Connecticut Department of Environmental Protection for the Greater Connecticut one-hour serious ozone nonattainment area. The SIP revision was subject to public notice and comment by the State and a hearing was held in May 1998. Connecticut also requested an attainment date extension for this area in its September 1998 submittal. The State requested a new attainment date of November 15, 2007. On February 8, 2000, Connecticut DEP submitted an addendum to the ozone attainment demonstration for the Greater Connecticut nonattainment area. The addendum was submitted in response to requirements EPA articulated as necessary for full approval in its proposed rulemaking on the September 16, 1998 attainment demonstration SIP.

II. What Previous Action Has Been Taken on This SIP Revision?

EPA published a Notice of Proposed Rulemaking (NPR) for the State of Connecticut's Greater Connecticut area's ozone attainment demonstration on December 16, 1999 (64 FR 70332). In that action, EPA proposed to approve the ozone attainment demonstration submitted by the State, and proposed to approve an attainment date extension for the Greater Connecticut nonattainment area to November 15, 2007. EPA also proposed, in the alternative, to disapprove the attainment demonstration if Connecticut did not submit an adequate motor vehicle emissions budget consistent with attainment. Also, on December 16, 1999, EPA proposed to approve and/or conditionally approve or disapprove in the alternative the attainment demonstration SIPs for nine other areas in the eastern United States (64 FR 70317).

On February 22, 2000 (65 FR 8703), EPA published a notice of availability announcing two guidance memoranda relating to the ten one-hour ozone

attainment demonstrations (including Greater Connecticut) proposed for approval or conditional approval on December 16, 1999. The guidance memoranda are entitled: "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations," dated November 3, 1999, and "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas," dated November 30, 1999.

On June 16, 2000 (65 FR 37778), EPA notified the public that we had found the 2007 VOC and NO_x motor vehicle emission budgets submitted by Connecticut on February 8, 2000 adequate for conformity purposes. A public comment period was held on these budgets when they were posted at www.epa.gov/oms/transp/conform/cursips.htm. The public comment period began on February 14, 2000, and closed on March 20, 2000. No public comments were received by EPA during the public comment period offered by EPA on the specific transportation conformity budgets submitted by Connecticut DEP on February 8, 2000. EPA did, however, receive comments that opposed EPA determining budgets submitted by Connecticut adequate for transportation conformity purposes when we originally proposed approval of the Greater Connecticut attainment demonstration on December 16, 1999. EPA responded to all of those comments before determining the 2007 budgets adequate. A copy of the response to comments is available at http://www.epa.gov/oms/transp/conform/resp_ct.pdf.

On July 28, 2000 (65 FR 46383), a notice of supplemental proposed rulemaking was published relating to the ten one-hour ozone attainment demonstrations (including Greater Connecticut) proposed for approval or conditional approval on December 16, 1999. In the supplemental notice, EPA clarified and expanded on two issues relating to the motor vehicle emissions budgets in the attainment demonstration SIPs. In addition, EPA reopened the comment period to take comment on those two issues and to allow comment on any additional materials that were placed in the dockets for the ten proposed actions close to or after the initial comment period closed on February 14, 2000.

On October 16, 2000 (65 FR 61134), another notice of supplemental proposed rulemaking was published to provide further support for the proposed attainment demonstration published on December 16, 1999 for the four serious

ozone nonattainment areas (which includes Greater Connecticut). In this supplemental notice, EPA made available an analysis it had performed to evaluate emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional reasonably available control measures (RACM) are available after adoption of Clean Air Act (CAA or Act) required measures in the four serious ozone nonattainment areas (i.e., Greater Connecticut; Western Massachusetts; Washington, D.C.; and Atlanta, Georgia).

As explained in the supplemental notice, EPA performed this analysis in response to comments that were submitted on the proposals for these areas' one-hour ozone attainment demonstrations. Originally, EPA established a comment period for this supplemental proposal ending on October 31, 2000. A notice extending the comment period on the October 16, 2000 notice was published on November 2, 2000 (65 FR 65818). Due to a typographical error in the November 2, 2000 notice, an additional notice clarifying the close of the comment period was published on November 9, 2000 (65 FR 67319).

Comments received on all of the proposed notices listed in this section relevant to the Greater Connecticut attainment demonstration and attainment date extension are discussed in section VI below.

III. What Are the Requirements for Full Approval of the Attainment Demonstration?

In the NPR for the Greater Connecticut attainment demonstration SIP published on December 16, 1999, EPA proposed, in the alternative, to disapprove the attainment demonstration if Connecticut did not submit an adequate motor vehicle emissions budget consistent with attainment. EPA also said it will require Connecticut to incorporate the Tier 2/Sulfur requirements into the attainment demonstration in order to fully approve the attainment demonstration. This was based on the view that the Tier 2/Sulfur program benefits were needed to improve the state's weight-of-evidence analysis. EPA stated that it expected Connecticut to revise and submit its motor vehicle emissions budgets to account for Tier 2 reductions before final approval of the attainment demonstration, and to commit to further

revise those motor vehicle emissions budgets within one year of when EPA issues the MOBILE6 model for estimating mobile source emissions. Lastly, EPA required Connecticut DEP to amend the enforceable commitment it submitted with its attainment demonstration to submit a mid-course review (MCR). EPA said that in order for EPA to move forward to approve the Greater Connecticut attainment demonstration, Connecticut will have to agree to perform the MCR immediately following the 2003 ozone season and to submit the results to EPA by December 31, 2003.

As discussed in section IV below, Connecticut has met all of the above requirements for full approval of its attainment demonstration for the Greater Connecticut area.

IV. How Did Connecticut Fulfill These Requirements for Full Approval?

On February 8, 2000, Connecticut DEP submitted an addendum to the ozone attainment demonstrations for the Greater Connecticut serious nonattainment area and for Connecticut portion of the New York-Northern New Jersey-Long Island severe ozone nonattainment area. The addendum was submitted in response to requirements EPA articulated as necessary for full approval in its proposed rulemakings on the two attainment demonstration SIPs. A public hearing on the addendum was held by the Connecticut DEP in January 2000. This addendum to the SIP, as it pertains to the Greater Connecticut serious nonattainment area, is being approved in this final action. The addendum to the SIP, as it pertains to the Connecticut portion of the New York-Northern New Jersey-Long Island severe ozone nonattainment area, will be dealt with in a future rulemaking action.

The February 8, 2000 addendum contained 2007 VOC and NO_x motor vehicle emissions budgets for the Greater Connecticut serious nonattainment area. The motor vehicle emissions budgets were calculated to be consistent with requirements Connecticut is relying on in its attainment demonstration for the Greater Connecticut area. Connecticut also incorporated credit for the Tier 2/sulfur program in calculating the emissions budgets consistent with the issued November 8, 1999 memorandum entitled "1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking" from Lydia Wegman, Office of Air Quality Planning and Standards and Merrylin Zaw-Mon, Office of Mobile Sources. The motor vehicle emissions budgets for 2007 for

VOC and NO_x submitted by Connecticut are shown in Table 1.

TABLE 1—2007 TRANSPORTATION CONFORMITY BUDGETS

One-hour ozone non-attainment area	VOC (tons/day)	NO _x (tons/day)
Greater Connecticut	30.0	79.6

EPA sent a letter to Connecticut DEP on May 31, 2000 finding these budgets adequate for use in transportation conformity determinations. Our adequacy determination was done subsequent to EPA offering an opportunity for public comment on the Connecticut budgets and addressing all relevant comments received. The public comment period began on these budgets when they were posted on EPA's web site at www.epa.gov/oms/transp/conform/currps.htm. The public comment period began on February 14, 2000, and closed on March 20, 2000, and no public comments were received by EPA during this period. As explained previously, EPA did receive comments that opposed EPA determining adequate the budgets submitted by Connecticut for transportation conformity purposes during the original comment period on the proposed approval of the Greater Connecticut attainment demonstration. EPA responded to all of those comments before determining the 2007 budgets adequate. A copy of the response to comments is available at http://www.epa.gov/oms/transp/conform/resp_ct.pdf.

On June 16, 2000 (65 FR 37778), EPA notified the public that we had found the 2007 VOC and NO_x motor vehicle emission budgets submitted by Connecticut on February 8, 2000 adequate for conformity purposes. These budgets became effective on July 3, 2000. In today's action, EPA is approving these budgets into the SIP.

The budgets that we are approving into the SIP in today's action should be used for transportation conformity purposes until revised motor vehicle emissions budgets are submitted and EPA has found them adequate. The budgets we are approving today as part of the attainment demonstration will apply for conformity purposes until there are new, adequate budgets consistent with the commitments to revise the budgets. Connecticut has committed in its February 8, 2000 addendum to the attainment demonstration to revise their VOC and NO_x transportation conformity budgets within one year of the release of MOBILE6. These revised budgets will apply for conformity purposes as soon

as we find them adequate. EPA is approving that commitment in today's action. If the State fails to meet its commitment to submit revised budgets using MOBILE6, EPA could make a finding of failure to implement the SIP, which would start a sanctions clock under Clean Air Act section 179. Once we have confirmed that the revised budgets are adequate, they will be more appropriate than the budgets we are approving for conformity purposes now.

If the revised budgets raise issues about the sufficiency of the attainment demonstration, EPA will work with States on a case-by-case basis. If the revised budgets show that motor vehicle emissions are lower than the budgets we are approving today, a reassessment of the attainment demonstration's analysis will be necessary before reallocating the emission reductions or assigning them to the motor vehicle emissions budget as a safety margin. In other words, the area must assess how its original attainment demonstration is impacted by using MOBILE6 vs. MOBILE5 before it reallocates any apparent motor vehicle emission reductions resulting from the use of MOBILE6.

The Addendum also includes Connecticut's analysis of the future air quality design value for the Greater Connecticut serious nonattainment area, which is identical to the EPA analysis found in the Technical Support Document to the notice of proposed rulemaking published December 16, 1999. This analysis supports the contention outlined in the notice of proposed rulemaking that additional emission controls beyond the benefits of the Tier 2/Sulfur program are not expected to be needed for the Greater Connecticut area to demonstrate attainment.

Lastly, the February 8, 2000 addendum contains a commitment by Connecticut to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007. Connecticut has committed to perform the review and submit the results to EPA by December 31, 2003. EPA is approving that commitment in today's action.

V. What SIP Elements Did EPA Need To Take Final Action on Before Full Approval of the Attainment Demonstration Could Be Granted?

In the NPR for the Connecticut attainment demonstration SIP published on December 16, 1999, EPA stated that it intended to publish final rulemaking on VOC RACT pursuant to sections 182(b)(2)(A) and (C) of Clean Air Act, the 9% rate of progress plan through

1999, the State opt-in to the National Low Emission Vehicle program, and the NO_x SIP call SIP for the Greater Connecticut area either before or at the same time as publication of final approval of the attainment demonstration. These measures are needed to fully approve the attainment demonstration and the attainment date extension request.

EPA approved the Connecticut VOC RACT rules pursuant to sections 182(b)(2)(A) and (C) of Clean Air Act on October 19, 2000 (65 FR 62620). EPA approved the Connecticut area's 9% rate of progress plan on October 19, 2000 (65 FR 62624). EPA approved Connecticut's opt in the National Low Emission Vehicle (NLEV) program on March 9, 2000 (65 FR 12476). Lastly, the final approval of Connecticut's NO_x SIP call SIP was granted by EPA Region I's Regional Administrator on October 20, 2000. As of December 15, 2000, this approval was awaiting publication. The approved SIP Call rule will be promulgated at 40 CFR 52.370(c)(86).

Additionally, subsequent to the December 16, 1999 proposal, EPA granted full approval to two other SIP elements in Connecticut. On March 9, 2000 (65 FR 12474), EPA approved Connecticut's Clean Fuel Fleets Substitute Plan as meeting the requirements of section 182(c)(4) of the Clean Air Act. On October 27, 2000 (65 FR 64357), EPA approved the Connecticut Enhanced Inspection and Maintenance program SIP converting it from a limited approval under the Clean Air Act to a full approval.

VI. What Comments Were Received on the Proposed Approvals and How Has EPA Responded to Those?

EPA received comments from the public on the Notice of Proposed Rulemaking (NPR) published on December 16, 1999 (64 FR 70332) for the Greater Connecticut area's ozone attainment demonstration. Comments were received from the Conservation Law Foundation; Robert E. Yuhnke (Attorney for Environmental Defense and Natural Resources Defense Council); the Midwest Ozone Group; and ELM Packaging Company. The following discussion summarizes and responds to the comments received on the December 16, 1999 proposal. For convenience, the comments have been grouped into categories.

EPA also received comments from the public on the supplemental proposed rulemaking published on July 28, 2000 (65 FR 46383), in which EPA clarified and expanded on two issues relating to the motor vehicle emissions budgets in the attainment demonstration SIPs.

Comments were received from Environmental Defense. The following discussion also summarizes and responds to these comments.

Lastly, EPA received comments from the public on the supplemental proposed rulemaking published on October 16, 2000 (65 FR 61134) to support the proposed attainment demonstration published on December 16, 1999. In that notice, EPA made available an analysis it had performed to evaluate emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. Comments applicable to the Greater Connecticut nonattainment area were received from the Midwest Ozone Group. The following discussion summarizes and responds to these comments as well.

A. Attainment Date Extension Policy

In these responses, EPA addresses both the comments received on this rulemaking and those received in Docket A-98-47 on its notice regarding "Extension of Attainment Dates for Downwind Transport Areas" 64 FR 12221 (March 25, 1999), insofar as here relevant. This includes responses to comments filed by EarthJustice and incorporated by reference in later comments filed on proposed EPA actions on the individual areas. General comments on the policy are considered first. Then specific comments as applied to the area are addressed.

1. Comments Received in Response to March 1999 Notice

Comment 1: EPA does not have the legal authority to extend the attainment deadline for serious areas until hoped-for NO_x reductions occur from upwind States in response to the NO_x SIP call and/or section 126 actions. Such an extension is not authorized by any provision of the statute. It is not within EPA's discretion to extend the attainment dates for downwind areas classified as moderate or serious. The Act does not authorize EPA to extend attainment deadlines. Congress provided express attainment deadlines in the Clean Air Act, and EPA is without authority to create exemptions from them. Section 181 provides the only exception to the general rule that areas must meet their attainment dates, and is the exclusive remedy. Section 181(a)(5) allows a one-year extension if the State has complied with all requirements and commitments in the applicable SIP and had no more than

one exceedance in the attainment year. In section 181(a)(5), Congress provided other authority for extending attainment dates, but not to address effects of transport. See sections 181(a)(5).

Section 181(b)(2)(A) requires reclassification for failure to attain by the attainment date. Section 182 requires submissions of attainment plans by the applicable attainment date. EPA's policy violates these express provisions. The statutory deadlines for attainment, the requirement that SIPs adopt measures adequate to provide for attainment by the statutory deadlines, the statutory limitation on EPA's authority to extend attainment dates under section 181(b), and the procedures to be followed in the event an area fails to attain by the deadline are unequivocal and unambiguous, and compliance is required under step one of Chevron. The extension policy is inconsistent with sections 182(b)(1)(A), 182(c)(2)(A) and 172(c)(1), which require each nonattainment area to provide for attainment and submit SIPs providing for attainment by the applicable deadline. There is no exemption from these mandates for downwind areas that can attain through local reductions, but find it difficult to do so. The EPA policy is also inconsistent with the Phoenix reclassification action, which stated that EPA had no flexibility to provide for attainment date extensions in that circumstance. In section 181(i) Congress refused to give EPA authority to extend attainment dates in light of reclassification.

Response 1: The absence of an express provision in the Clean Air Act for an attainment date extension based on transport does not deprive EPA of the authority to interpret the Act to permit such an extension. Nor do the specific attainment date extension provisions in the statute preclude EPA's interpreting the statute to allow for an extension to account for upwind transport that has interfered with downwind attainment. This interpretation is necessary to prevent the thwarting of Congressional intent not to unfairly burden downwind areas. In various parts of the statute, Congress expressed an intent to accomplish this through provisions prohibiting transport, but these provisions failed to achieve the Congressional goal in time to allow the downwind areas to meet their originally prescribed attainment dates.

The provisions of section 182 governing reclassification also do not prohibit EPA from interpreting the Act to provide for an attainment date extension based on transport. EPA's policy of extending attainment dates for

ozone nonattainment areas affected by transport of ozone and ozone precursors represents a reasonable effort to avoid the frustration of Congressional intent to which a literal application of the reclassification provisions would lead. Where a "literal reading of the statute would actually frustrate the congressional intent supporting it, [a court may uphold] an interpretation of the statute more true to Congress's purpose." *EDF v. EPA*, 82 F.3d 451, 468 (D.C. Cir. 1996).

In 1990, Congress established a classification scheme for ozone nonattainment areas that provided for those areas to be classified on the basis of the severity of their ozone problems and for areas with more serious problems to be given more time to attain, but also required to implement more control measures. As part of these provisions, Congress enacted the reclassification provisions under which ozone nonattainment areas that failed to attain the ozone standard as of their attainment dates were to be reclassified to a higher classification, thereby receiving an extension of their attainment date, but also being subjected to additional control requirements. See section 181(b)(2).

On their face, the reclassification provisions do not provide for any exemption from the reclassification process for areas affected by ozone transport from other States. However, EPA believes that, in light of developments since the enactment of the 1990 Clean Air Act Amendments, a literal application of those provisions to such areas would frustrate broader congressional intent. In this context it is important to recognize that, apart from the ozone reclassification provisions, the Act contains a provision—section 110(a)(2)(D)—that obligates upwind States to prohibit pollution—including ozone and its precursors—from sources within the State that contribute significantly to nonattainment and maintenance problems in downwind States. Congress was cognizant of the need to control such emissions, and of the inequities between upwind and downwind sources that could result if upwind States did not impose emission controls on their sources that contribute to downwind air quality problems. Congress thus sought to establish a regime that would eliminate such inequities.

The legislative history of the 1977 Clean Air Act Amendments regarding the enactment of section 110(a)(2)(E), the predecessor of section 110(a)(2)(D), and section 126 (a provision that allows EPA to directly regulate sources that significantly contribute to

nonattainment in another State) clearly demonstrates this. The Senate Committee Report criticized the lack of effective "interstate abatement procedures" and "interstate enforcement actions" under existing law, which the Committee viewed as "resulting in serious inequities among several States, where one State may have more stringent implementation plan requirements than in another State." S.Rep. No. 95-127 at 41, *reprinted in* 3 1977 Legis. Hist. 1416.

It is reasonable to assume that Congress, when it enacted the ozone reclassification regime in 1990, would have expected that upwind States would have in place implemented SIP provisions that would eliminate significant contributions, as required by section 110(a)(2)(D), by the time downwind areas were obligated to attain the ozone standard. If that had happened, downwind areas that failed to attain by their attainment dates would have failed to attain as a consequence of their own failures to adopt necessary controls, not as a consequence of the failure of other States to adopt and implement controls necessary to eliminate the contribution of their own sources to the downwind area's nonattainment problem.

Such controls were not in place, however, since, as explained in EPA's transport policy, it in fact took many years for EPA and the States to gain a sufficient understanding of the interstate ozone transport problem to determine the appropriate division of control responsibilities between the upwind and downwind States under the Clean Air Act. It was only through the work of the Ozone Transport Assessment Group (OTAG), which consisted of members from States, industry and environmental groups, and EPA's subsequent NO_x SIP call, promulgated in October, 1998, that the division of responsibilities among the States was established. Consequently, the fruits of those efforts—the implementation of the control measures in upwind States that were needed to eliminate the significant contribution of sources in those states—would not ripen until 2003 or 2004, years after the statutory attainment dates for areas such as Springfield, MA. Moreover, because the allocation of responsibility for transport was not made until late 1998, the prohibitions on upwind contributions under section 110(a)(2)(D) and section 126 could not be enforced prior to the attainment dates of areas such as Washington, DC, Greater Connecticut and Springfield, MA. Nor could Congress intend that the upwind areas with later attainment dates

accelerate the timetables provided for their own attainment as an indirect means of controlling transported pollution in the absence of data on transport impacts.

To apply the reclassification provision of section 181(b) without taking into account the timing of the identification and implementation of the emission reductions needed to eliminate the significant contribution of the upwind States to the downwind States would lead to the result that the downwind States' sources are required to implement potentially costly control measures to offset the effects of upwind State pollution—pollution that EPA has now determined must be prohibited under the Act and pollution that will soon be eliminated as a result of the NO_x SIP call and by emissions reductions in upwind States with later attainment dates. Imposing on downwind areas the burden of controlling for pollution attributable to upwind sources would compound the inequities that Congress was seeking to avoid with the enactment of sections 110(a)(2)(D) and 126, thereby frustrating Congressional intent. Moreover, such a result would be at odds with the kind of concerns that led Congress to adopt section 179B for international border areas—concerns that areas not be held accountable for pollution over which they exercise no control.

Section 181(b)(2) provides that EPA should determine whether an area attained the standard “within six months following the applicable attainment date (including any extension thereof).” This reference to extensions in section 181(b)(2) is not limited to extensions granted under section 181(a)(5). Nor does section 181(a)(5) state that Congress intended it to be the only source for an extension.

Moreover, section 181(a)(5) addresses only one specific type of an extension. The fact that Congress provided an extension based on air quality that is near attainment at the time of its deadline does not imply that Congress precluded the Administrator from conferring extensions based on other considerations—such as the case when air quality is affected by downwind transport. The principle underlying section 181(a)(5)—that areas should not be reclassified if they have done enough to control local air pollution but are still not able to attain—also applies in the case of downwind transport. Section 181(a)(5) shows that Congress was not unalterably opposed to extensions of attainment dates without requiring an area to be subjected to reclassification and the increased control burdens that go with reclassifications. Indeed, section

181(a)(5) indicates that Congress wanted to extend attainment dates without adding control obligations when an area had done what was apparently sufficient to bring it into attainment.

The United States Court of Appeals for the District of Columbia Circuit has previously held that EPA may extend SIP submission deadlines even without explicit statutory authorization. In *Natural Resources Defense Council, Inc. v. EPA*, 22 F.3d 1125, 1135–36, the Court upheld EPA's extension of a statutory deadline for submission of NO_x rules and a NO_x exemption request under section 182(f). Although the Court did not use the theory advanced by EPA, the court did find that the Agency had authority under the CAA to extend the deadline. EPA had found that additional time would be needed for States to conduct photochemical grid modeling in order to document the effects of NO_x reductions on an area. EPA had found that “the time needed to establish and implement a modeling protocol and to interpret the model results will, in a variety of cases, extend beyond the November 15, 1992 deadline for submission of NO_x rules.”

EPA thus extended the submission deadline, provided the States could show that modeling was not available or did not consider effects of NO_x reductions and that the States submit progress reports on the modeling. The D.C. Circuit upheld EPA's extension of the deadline and of EPA's time to review the submissions and make an exemption determination. The Court found that “because only a single NO_x RACT submission is required under the statute, it is logical to infer that Congress intended data supporting exemptions to be included in that submittal and that the EPA have the full 14–18 months to review them and to make an exemption determination.” Even in the absence of explicit statutory authority, the Court held that “had Congress foreseen the exemption timing problem, a matter outside the EPA's control, it would have elected to accord the EPA the full statutory review time.” 22 F.3d at 1136. The court ruled that “under the circumstances here the NO_x RACT deadlines were properly extended to further the Clean Air Act's purposes.” *Id.* At 1137.

Here, similarly, EPA's and the States' inability, until the OTAG and NO_x SIP call process was completed, to document the impacts of upwind areas on the attainment status of downwind areas, and to assess and allocate responsibilities among the areas, caused a delay in meeting the attainment deadlines. EPA believes that, had Congress foreseen this timing problem,

it would have elected to accord the States and EPA more time to meet the attainment deadlines without imposing reclassification requirements on downwind areas. As in the case of the delayed photochemical grid modeling needed for the NO_x submissions at issue in *NRDC v. EPA*, EPA has shown that the ability to document and analyze ozone transport was delayed. And as with the criteria imposed on areas seeking NO_x submission extensions in *NRDC*, EPA has required analogous showings by the States, limiting the extensions to those areas that document a transport problem and that submit attainment demonstrations and adopt local measures to address the pollution that is within local control.

As for section 182(i), it has no bearing on the authority of the Administrator with respect to the attainment date extensions at issue here. Section 182(i) applies to the authority of the Administrator after an area has been reclassified, and relates to the setting of an attainment date for the reclassified area. It does not apply to an area that is not being reclassified, but rather is being granted an extension of its attainment date that effectively defers the applicability of the reclassification provisions. Here, EPA is authorizing an attainment date extension to relieve an area from reclassification requirements, and thus 182(i) does not apply. The section explicitly applies to an area that has already been reclassified, and indicates nothing about the authority of the Administrator to extend an area's attainment date prior to a determination that the area must be reclassified. Nor does section 182(i) indicate Congressional intent to deny EPA authority to interpret the Act consistently with provisions designed to prevent downwind areas from being forced to compensate for upwind pollution.

Comment 2: The Act does not authorize EPA to extend the time for implementation of adopted local control measures. EPA's approach allows downwind areas to defer implementation of local measures until the extended attainment deadline, thereby precluding any determination that the local measures have achieved the degree of emission reduction necessary to provide for attainment when the upwind sources are controlled. EPA unlawfully proposes to allow attainment date extensions for downwind areas to implement local control measures. Under sections 182(b)(1), 182(c)(2)(A), and 172(c)(1), downwind areas must provide for attainment of the NAAQS, and EPA

unlawfully seeks to lessen these statutory obligations.

Response 2: As explained in Response 1, above, EPA's attainment date extension policy aims to effectuate, not frustrate the intent of Congress, by providing for an equitable allocation of responsibilities between upwind and downwind areas. Under EPA's interpretation, when an upwind area interferes with a downwind area's ability timely to attain the standard, the downwind area retains the obligation to adopt all applicable local measures, and to implement them as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. Moreover, EPA requires that the area submit an approvable attainment demonstration containing any necessary, adopted local measures and showing that, assuming the appropriate upwind emission reductions, the area will attain the 1-hour standard no later than the final NO_x SIP call and/or the upwind area's attainment date.

Thus both the upwind and downwind areas are held accountable for their respective shares of the emissions reductions required to achieve attainment in the area. EPA views this coordination of the responsibilities of the upwind and downwind areas not as a lessening of the statutory obligations, but as a reconciliation of them with the reality of air transport as we have come to understand it, and with the intent of Congress that areas make expeditious progress towards attainment without sacrificing basic principles of fairness. The attainment date extension policy thus will still lead to attainment as expeditiously as practicable, taking into account the upwind contribution. Indeed, given the impact of upwind areas' contributions and the need for upwind area emissions reductions, requiring local contributions earlier would not accelerate attainment, considering that EPA is requiring downwind areas to implement local controls as expeditiously as practicable.

Moreover, the difficulty of assessing relative contributions and responsibilities of upwind and downwind areas until the completion of the OTAG effort and the NO_x SIP call lends support to extending attainment deadlines in these circumstances, even without express statutory permission. See *NRDC versus EPA*, discussed supra, in Response to Comment 1.

Comment 3: Reclassification alone has no immediate or mandated regulatory consequence. A SIP revision can consist of a showing that attainment will result from implementation of emission

reductions already required pursuant to the SIP call. EPA's Extension Policy is inconsistent with Clean Air Act sections 179(c) and (d). This provision does not require additional local control measures beyond those previously approved implemented by the State if adequate control measures have been adopted for upwind areas and are in the process of being implemented.

Response 3: Reclassification does impose regulatory consequences. Section 182(i) requires that "each state containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet the requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified." Thus the area must meet the more stringent requirements of a higher classification, including new source review offsets and changes in cutoffs for permitting. The provisions of section 181(b) apply to reclassification of ozone areas. Sections 179(c) and (d) do not apply to ozone areas that are classified as marginal, moderate, or serious, which are subject to the requirements of section 181, if EPA determines that they failed to attain the ozone standard as of the applicable attainment date pursuant to that section.

Comment 4: Sections 176 and 184 of the CAA do not support EPA's extension policy. Congress left no room in the statute for attainment date extensions for downwind areas, considering instead the additional recommended OTC control measures for upwind areas to be sufficient. Sections 110(a)(2)(D)(i)(1) and 110(a)(2)(A) do not authorize the EPA policy. Section 110(a)(2)(D) imposes a burden only on upwind States and does not relieve downwind States of their obligation to attain by the pre-set attainment dates. EPA lacks the authority to rewrite the extension authority Congress wrote into sections 181(a)(4) and (b)(3). Congress was well aware of the transport problem and addressed it in explicit provisions, including section 110(a)(2)(D), section 110(a)(2)(A), section 184, section 176A, section 126, section 182(h), and section 181(a)(4). Thus Congress knew how to address pollutant transport and how to draft an attainment date extension addressed to it when it wished to do so.

It also provided for voluntary reclassification under section 181(b)(3) to be available for downwind areas are affected by transport. Congress dealt with transport explicitly in sections 181(a)(4), 182(h) and 182(j)(2). Congress knew how to exempt transport-affected areas from control requirements if it wanted to, as it did for rural transport areas under section 182(h). Congress

limited relief for areas subject to transport to exemption from sanctions, but did not extend this to section 110(c) FIPs. H.R. 101-490, at 248. This shows Congress' intent to apply all of the CAA enforcement tools except for sanctions under section 179. Congress considered the effects of transport, but not in the reclassification context. Congress did provide for attainment date extensions, but not in this context.

Response 4: Having crafted provisions in the 1990 Amendments that it believed would be adequate to address the problem of downwind nonattainment, Congress did not expressly provide for an attainment date extension based on transport. But the absence of such a provision does not prevent EPA from inferring that Congress would have intended to provide such relief should the express provisions fail to function as envisioned. In fact, the manner in which Congress did address the issue of transport shows that EPA's interpretation is consistent with Congress's approach in other sections of the Act. EPA's interpretation resolves the problem that arose when the express statutory tools failed to function as Congress had envisioned. It also, as EPA pointed out in its guidance, 61 FR 14441 (March 25, 1999), provides a means to reconcile the attainment demonstrations and attainment date requirements for downwind areas with the graduated attainment date scheme and schedule for achieving reductions in the upwind areas. Although Congress intended that upwind areas be responsible for preventing interference with downwind areas' attainment dates, it also expressly allotted more time for certain upwind areas to reduce their emissions so as to attain the standard.

Sections 110(a)(2)(D), 126, 184 and 176, provide principles for dealing with transport, most importantly the principle that upwind areas be held accountable for reducing emissions that interfere with the ability of downwind areas to attain the ozone standard. EPA disagrees with commenters that Congress intended section 110(a)(2)(D) and the other transport provisions to exclude the possibility of relief for downwind areas even if no timely and adequate recourse against transport was in fact available to them. These sections express Congressional intent that downwind States not be saddled with responsibility for pollution beyond their control. Their premise was that there would be a means of redress against upwind States prior to the downwind area's attainment date—a means that also would not be at odds with Congress's decision to provide longer

attainment periods for upwind areas confronting onerous pollution problems. But, as EPA pointed out in its guidance, there was in fact no practicable way to carry out the Congressional scheme until a much more comprehensive understanding of the complex facts of ozone transport could be achieved.

Although Congress in the 1990 Amendments and in prior versions of the Clean Air Act attempted to deal with the issue of transport, the reality of the problem proved far more complicated and intractable than expected. As explained in EPA's guidance, 64 FR 14441 (March 25, 1999), it took many years for EPA and the States to study, analyze, and attempt to resolve the allocation of responsibility for transported ozone pollution. EPA's initial efforts included a policy memorandum addressing the issue of overwhelming transport in 1994. The Ozone Transport Assessment Group was launched in 1995. Through this collaborative process, EPA, 37 States and industry and environmental groups tackled the problem of allocating responsibility for transport in its Overwhelming Transport Policy. During the period required for this effort, the resolution of regional transport issues was held in abeyance. It was not until late in 1998 that the conclusion of the OTAG and SIP call processes resulted in assignments of responsibility that could assist in the design of SIPs and the formation and implementation of attainment demonstrations. 63 FR 57356 (Oct 27, 1998) (NO_x SIP Call Rule). In May 1999, these efforts were reinforced when EPA approved petitions submitted under Clean Air Act section 126 by northeast States to mandate federal controls on utilities and other large NO_x emitters in upwind States. 64 FR 28250 (May 27, 1999) (Section 126 Rule). A more detailed description of the history of efforts to address ozone transport through the 1990's may be found in the preambles to these rulemakings. 63 FR 57360–63, 64 FR 28253–54.

Even after the NO_x SIP call rulemaking was complete, it was temporarily placed in doubt when the Court stayed the SIP call rule pending judicial review. The court has ordered NO_x SIP call SIPs to be submitted by October 30, 2000, and to require sources to implement controls by May 31, 2004.

Thus, although Congress in the Clean Air Act had formulated a prohibition on transport interfering with downwind attainment, it remained largely theoretical until EPA and the States could understand how to identify, quantify, and analyze the transport of emissions, and develop regulatory means to coordinate the respective

responsibilities of a multitude of upwind and downwind areas. Although Congress endowed EPA and the States with legal tools to protect downwind areas from interference with attainment, it did not give them the ability to use the tools in the time frame anticipated by Congress. By the time EPA and the States gained an understanding of regional transport sufficient to allow enforcement of the provisions of the Act, it was too late to help some downwind areas meet their attainment dates. Thus it is spurious to argue that EPA and the States could have sought and obtained meaningful relief earlier under section 126 and section 110.

The fact that upwind States are subject to the requirements of section 110(a)(2)(D) but other countries are not provides a possible explanation as to why Congress explicitly provided that ozone nonattainment areas not be reclassified upwards if they would have attained by their attainment dates "but for emissions emanating from outside" the United States (section 179B(b)) but provided no such express exemption from the reclassification provisions in the case of domestic transport. See IV 1990 Legis. Hist. 5741–42 (remarks of Sen. Gramm introducing the international provision and Sen. Baucus supporting it; Senator Gramm stated: "It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over. So what this amendment does it says that in assessing whether or not the State implementation plan has been met, and when assessing the levels of ozone * * * pollution that is being generated across the border has to be taken into account so that our cities and regions will be judged based on what they do. * * *. [The State, region and city] will have the opportunity to come to EPA an say that they are in compliance in terms of their emissions, that their failure to meet the overall standards is due to something that is happening in a sovereign foreign country over which they exercise no control." Senator Baucus stated that, "It is clear that cities like El Paso in the State of Texas do not have control of their own destiny themselves. Much of the air that affects them is from outside, from another country, over which the Senator said the State of Texas and EPA in this country has virtually no control."). Congress assumed that EPA would have control over domestic transport under section 110(a)(2)(D), so it saw no need to enact a domestic counterpart to section 179B. As set forth in EPA's responses and the history of EPA and the States' efforts to

understand and control transport, Congress's assumptions were not realized.

As set forth in Response 1 above, Congress intended, through enactment of the provisions addressing transport cited by commenters, to prevent downwind areas from being held accountable for pollution over which they exercise no control. Because of the complexity of the transport problem, EPA and the States could not deploy these statutory provisions in time to achieve attainment by their original attainment dates. But this does not mean that Congress would have intended EPA to construe the very provisions designed to protect downwind areas as precluding EPA from interpreting the statute to provide the relief that those provisions failed to furnish. Notwithstanding the absence of an express provision for an attainment date extension based on transport, EPA believes that, taking into account the Act read as a whole, Congressional intent supports EPA's interpretation of an attainment date extension in the circumstances presented here.

Commenters argue that the fact that Congress formulated various provisions addressing certain specific types of issues concerning transported pollution, but did not provide for an explicit attainment date extension based on transport, should be taken as proof that Congress meant to preclude such relief. But each of the provisions cited by commenters—to sections 181(a)(4), 182(h) and 182(j)(2)—was designed to address a different problem from the one EPA addresses here, and none undermines EPA's interpretation that Congress intended to provide relief in the situations currently confronted by downwind areas. As shown in EPA's previous responses, Congress expressed its intent in the transport sections to protect downwind areas from the burdens of transported pollution, but the mechanisms it provided could not be invoked in time.

As for the sections referenced by commenters, section 181(a)(4) concerns the potential for adjustment of the original classification of an area if its design value is within a certain margin. It allows the Administrator to consider a number of factors, including among them transport. This provision in no way casts doubt on the Congressional intent not to penalize downwind areas through mandatory reclassification should they later fail to attain the standard due to transport. Section 182(h) provides a mechanism for original classifications of rural transport areas as marginal areas, the lowest level of ozone nonattainment areas. Far from

indicating that Congress did not intend relief for areas that are victims of transport, this provision reflects Congressional concern with not burdening areas with responsibility for transport not of their making. It sheds no light on whether Congress would have intended EPA to reclassify areas suffering from transported pollution if they were subsequently unable to meet their attainment dates.

Nor, as commenters suggest, would so-called "voluntary" reclassification under section 181(b)(3) furnish an adequate remedy for the situation confronting areas that fail to attain due to interference from transport. An area that felt constrained to seek "voluntary" reclassification would still be forced to subject itself to more stringent requirements to control local pollution in lieu of imposing on upwind areas the responsibility for the transport they caused.

Comment 5: The States had power to timely submit SIPs controlling local pollution to the full extent that it was in the State's power to require, and combine it with a request to EPA to invoke EPA's authority to control upwind pollution, and in this way the State could have attained by the applicable deadline. EPA's 1994 overwhelming transport policy required transport modeling to be documented the same time as the attainment demonstration due in 1994. There is no justification for allowing States to request attainment date extensions based on transport of which they were aware many years ago. An opening is created for upwind States to argue that the NO_x SIP call effectively accelerates their attainment dates. The OTC was to recommend measures to bring about attainment by the deadlines "in this subpart."

Response 5: As pointed out in EPA's Response 4, above, an awareness that transport was occurring is not equivalent to an ability to identify, analyze, and control the emissions that cause it. This ability, which grew out of years of study and joint effort, did not coalesce until late in 1998. Thus, downwind States were faced with the prospect of having to shoulder responsibility for pollution not of their making—a responsibility that Congress did not intend to impose on them, even as they were aware of an ongoing effort, involving EPA and thirty-seven States, to allocate responsibilities for transport through the OTAG process. As EPA stated in its guidance on the attainment date extension, the state of knowledge about and the ability to document and model transport has advanced

considerably since the issuance of EPA's overwhelming transport guidance. The commenters seek to ignore the climate of uncertainty in which States and EPA were operating with respect to controlling transported pollution. Section 110(a)(2)(D) and 126 are not self-executing, and until the culmination of the OTAG process, downwind areas in the OTAG region could not determine what boundary conditions they should assume in preparing attainment demonstrations and determining the sufficiency of local controls to bring about attainment. Meaningful relief under these provisions simply was not available earlier.

But even with the allocation of responsibilities now available, EPA believes that Congress did not intend to accelerate the obligations of upwind States so that downwind States can meet earlier attainment dates. This would undermine the objective, firmly embodied in the graduated attainment framework of the Clean Air Act, to allow upwind areas with more severe pollution longer attainment deadlines. Upwind areas with later attainment dates still find it difficult to reduce emissions solely to control for transport without accelerating the time frames intended by Congress. It is unrealistic to expect upwind areas to be able to segregate out the reduction of emissions for purposes of transport from the reduction of emissions for purposes of achieving attainment in the upwind area.

The fact, as a commenter points out, that Congress envisioned that the OTC-recommended measures would bring about attainment by the dates "in this subpart" reflects Congress' over optimistic view that transport would be understood and controlled in time to allow upwind areas to be held accountable for their contributions to downwind nonattainment. The comment underscores that Congress expected upwind reductions to take place by the time the downwind area was supposed to attain—this confirms that Congress expected that upwind pollution would be controlled prior to downwind attainment deadlines, and that only local pollution would remain as the downwind area's responsibility. But, as we previously stated, the time line for analyzing and assessing transport, and the resulting ability to implement appropriate measures to control upwind pollution, did not keep pace with Congress's expectations. EPA is extending attainment deadlines in order to allow upwind areas to assume responsibility for the pollution they generate and that is transported across

State boundaries, and to fulfill the Congressional intent that downwind areas not be saddled with this burden.

Comment 6: EPA's decision directly conflicts with *NRDC v. EPA*, 22 F.3d 1125 (D.C. Cir. 1994), where the Court held that EPA could not extend a clear statutory submission deadline.

Response 6: To the contrary, EPA believes that *NRDC v. EPA* supports EPA's authority to issue the attainment date extensions at issue here. In that case the U.S. Court of Appeals for the D.C. Circuit upheld EPA's extension of SIP submittal deadlines even though such extensions were not expressly permitted by the Clean Air Act. See the discussion in Response to Comment 1, above. The Court relied in part on the need for additional time to undertake photochemical modeling to document the impact of NO_x reductions on individual areas, an effort that took more time than Congress anticipated. Here, the effort to document, model, and analyze regional ozone transport issues and assess responsibility for relative contributions is, if anything, more complex than the NO_x exemption showings for which the Court upheld deadline extensions in *NRDC v. EPA*. The Court's reasoning in *NRDC v. EPA* should be fully applicable to the policy at stake here.

Comment 7: A commenter concedes that "EPA's delay in establishing the mandatory emission reduction targets for upwind States might justify the delay in adoption of adequate section 110(a)(2)(D) measures by the upwind states," but concludes that the delay "cannot justify delaying the obligation of downwind States to implement all the local measures necessary for attainment by the statutory deadline." One commenter, while acknowledging that it "does not take issue with EPA's objective of accommodating the delayed control contributions from upwind areas," contests EPA's claim of authority to extend attainment dates. This commenter suggests that the appropriate remedy is for EPA to authorize States to take credit for mandated emission reductions when preparing attainment demonstrations and determining the degree of local controls needed to attain.

Response 7: While the commenter recognizes that there was a delay in understanding and regulating transported pollution that "might justify the delay" in upwind States adopting section 110(a)(2)(D) measures, and agrees with EPA's objective in taking this delay into account, the commenter's proposed solution fails to address the problem it acknowledges. The commenter suggests allowing areas to

take credit when they prepare their attainment demonstrations—but this solution addresses only the planning requirement, and does not assist the areas in solving the problem of failing to meet their attainment deadline. It is to address this issue, and to effectuate Congressional intent to avoid penalizing downwind areas in these circumstances, that EPA has formulated the attainment date extension. The delay in ascertaining the amount and achieving the reality of upwind reductions—a delay conceded by commenters—resulted in uncertainty in a downwind area's ability not only to plan for attainment, but to realize it.

This comment also highlights the difficulties that EPA's attainment date extension policy was designed to address: namely that the states and EPA were: (1) Not able to assess relative contributions until it was too late to implement the controls to bring about attainment; and (2) upwind areas with longer attainment dates should not be required to accelerate their reductions in time to help bring about attainment as scheduled in affected downwind areas with earlier attainment dates. As the policy explains, the determination of relative upwind and downwind contributions and the allocation of responsibility for determining controls did not occur in time for a number of areas to meet their attainment deadlines.

Comment 8: EPA's approach allows emission reductions from motor vehicles to be deferred beyond the deadlines currently required by the Act. The policy allows deferral of conformity budgets beyond the statutory attainment year. It is also inconsistent with statutory requirements for reasonable further progress in section 182(c)(2)(B), for implementation of all reasonably available control measures as expeditiously as practicable in section 172(c)(1), and for requiring that transportation plans and TIPs "will not delay timely attainment of any standard or * * * other milestones in any area in section 176(c)(1)."

Response 8: EPA disagrees with the commenter that the policy allows deferral of motor vehicle emission reductions and reasonably available control measures beyond dates contemplated in the Act. The statute requires SIPs to provide for attainment as expeditiously as practicable and for reasonable further progress as necessary to provide for attainment. The motor vehicle and RACM measures the commenter is apparently referring to are not specific measures that the statute requires to be implemented by a fixed date. Rather, they are whatever motor

vehicle and RACM measures are necessary to provide for attainment and RFP by the applicable attainment date. Thus, whatever attainment date is applicable, either by virtue of the statute or an attainment date extension, defines the outside date by which motor vehicle and RACM measures necessary to provide for timely attainment must be implemented. A determination must then be made whether any additional measures could advance that date, but the analysis is keyed to the established attainment date.

The commenter also complains about delays in establishing budgets for conformity purposes, and requirements that transportation activities not delay timely attainment. Again, these issues are not relevant to establishing an appropriate attainment date. Motor vehicle emission budgets for conformity purposes are those budgets that are established for the attainment year. The Act does not require that these budgets be set for any specific year, but rather contemplates that they will be established for the attainment year. Where EPA has properly determined that an attainment date extension should be granted, conformity budgets are required for the extended attainment year; they are no longer required for the superseded attainment year. The requirement that transportation activities not delay timely attainment is a duty imposed on transportation planning agencies to insure that their activities will not interfere with attainment of the standard by the applicable attainment date. This duty is irrelevant to establishing the appropriate attainment date in the first instance. Once an applicable attainment date is established, transportation planners must insure that their activities will not delay attainment by that date.

Comment 9: A commenter argues that under the terms of section 188(e), an extension of the PM attainment date may not be granted unless the State demonstrates that the area's SIP contains "the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any State, and can feasibly be implemented in the area." Moreover, section 188(e) provides for consideration of transboundary emissions from "foreign countries," not from U.S. sources. EPA's proposed ozone nonattainment extension policy includes neither of these limitations.

Response 9: The provision cited by commenters applies the PM-10 standard, and is not applicable to attainment dates for ozone. Moreover, the regulatory regimes applicable to

ozone and PM-10 are quite different, as are the types of transport issues that arise with respect to these two different pollutants. The issues EPA and the States confront with respect to long-range regional transport of ozone do not apply to PM-10. Beyond that, section 188(e) embodies a standard of "impracticability" as a basis for seeking an extension for a PM-10 attainment deadline. With respect to the ozone attainment deadlines at issue here, EPA is not granting extensions solely on the grounds of impracticability of attaining the standard, but rather, that Congress intended both upwind and downwind areas to have an opportunity to bear the responsibility for their respective contributions to an area's attainment problems.

Comment 10: EPA's effort to "manufacture a conflict" between the statutory deadlines and transport provisions fails, since these provisions must be read together so that the upwind area's "obligation to control pollution affecting the downwind area—be it interstate or intrastate—falls due no later than the downwind area's attainment date." EPA's argument that areas with longer attainment dates be given additional time ignores the statutory requirement that areas attain as expeditiously as practicable, even if that results in attainment before section 181(a)(1)'s outer deadlines. The section 181 attainment deadlines are "outside limits." A commenter argues that section 181(a) does not prevent upwind areas from abating pollution in downwind areas in time to meet the downwind area's attainment date. EPA's policy cannot be defended as necessary to reconcile 181(a) with the Act's anti-transport provisions. Upwind areas should be able to control pollution contributing to downwind area's nonattainment even before reaching their own later-prescribed attainment dates.

A commenter disputes EPA's interpretation of the language in section 110(a)(2)(D)(1) that SIP provisions prohibiting emissions which cause transport be "consistent with the provisions of this subchapter." EPA should interpret the provisions to respect the attainment schedules of sections 181 and 182, and address transport separately. No reference is made to any legislative history that would legitimize EPA's reading. An upwind area's obligation to control transported pollution does not depend on its own timetable for attainment. EPA's policy excuses upwind area's responsibility from their obligations under sections 110, 176A and 184,

exempting them via granting extensions to downwind areas. The policy defers downwind action until the upwind area attains.

EPA improperly assumes that it would not be practicable for upwind sources to reduce emissions contributing to downwind nonattainment prior to the time such reductions would be required to attain in the upwind area. The presumption should be precisely the opposite: unless the upwind state can show that such reductions are impracticable, EPA should assume such reductions can be made at times to eliminate the upwind state's contribution to nonattainment downwind by the downwind area's attainment date. EPA's rule eliminates the Act's requirement that attainment be accomplished as expeditiously as possible. Section 184 indicates Congressional intent that upwind areas make reductions if necessary to permit downwind areas to attain by their statutory deadlines.

Response 10: EPA disagrees with the commenter's contention that it has "manufactured a conflict." Rather, EPA believes that it recognizes and resolves the real tension between the statutory deadlines and the transport provisions. EPA explained this tension in its guidance on the attainment date extension policy. See also EPA's response to Comment 4. Congress did not intend that areas with more severe pollution problems, and accordingly longer attainment dates, be forced to accelerate reductions on a timetable that otherwise would not be deemed to be required in order to meet their obligation to attain "as expeditiously as practicable." Commenters want EPA to read the requirement for upwind areas, not as containing the limitation that their attainment deadline be "as expeditiously as practicable"—but instead, to require deadlines that are not practicable solely for the purpose of obtaining downwind reductions.

In dealing with ozone, a regional pollutant, an upwind nonattainment area cannot make reductions for transport purposes without affecting its schedule for making reductions for attainment purposes. Compelling the upwind area to make drastically faster reductions is akin to asking it to go on a crash diet. But the interplay of the statutory provisions on attainment deadlines and transport reduction indicates that Congress intended upwind areas to reduce transport, but not to the extent of requiring shorter schedules for upwind attainment. Separating out reductions for purposes of attainment and those for the purposes of transport is more difficult than

commenters depict, and EPA believes that Congress did not intend a regimen of drastic reductions without regard to the upwind area's attainment schedule. In reality, an upwind area that remains in nonattainment may doubtless be shown to continue to transport pollution to an affected downwind area.

Congress provided statutory tools to address the issue of transport (including sections 184, 126, and 110(a)(2)(d)), and believed that they would be used to reach an accommodation among upwind and downwind areas—but as EPA and some commenters have recognized, this accommodation took longer than anticipated. Congress did not, however, intend that upwind areas be forced to apply draconian measures in order to allow the downwind areas to meet their shorter attainment periods.

And although the attainment deadlines can be looked at as "outside limits," they in fact represent the dates at which statutory consequences must be considered. As long as no earlier date is deemed to be "as expeditiously as practicable," there is no evidence that Congress considered an earlier date to be acceptable for these areas, regardless of "practicability." Even if earlier deadlines would be beneficial to downwind areas, Congress did not indicate that this criterion should override the criterion of "practicability" for the upwind area.

In administering the Clean Air Act and the NO_x SIP call, EPA has interpreted section 110(a)(2)(d)'s significant contribution test as requiring reductions as expeditiously as practicable without requiring upwind areas to impose draconian measures. The United States Court of Appeals for the District of Columbia Circuit recently upheld EPA's use of a cost component in applying that section's significant contribution test. *Michigan v. EPA*, 213 F.3d 663, 674–679 (D.C. Cir. 2000). EPA decided that the States that were "significant contributors" under section 110(a)(2)(D) need only reduce their emissions by the amount achievable with "highly cost-effective controls." 63 FR at 57403. "Thus, once a state had been nominally marked a 'significant contributor,' it could satisfy the statute, i.e., reduce its contribution to a point where it would not be 'significant' within the meaning of section 110(a)(2)(D)(i)(I) by cutting back the amount that could be eliminated with 'highly cost-effective controls.'" 213 F.3d at 675.

In applying section 110(a)(2)(D), the D.C. Circuit concluded that EPA can consider not only air quality impacts, but also costs of control. Thus EPA has been upheld in interpreting the Act in

a way that limits the upwind area's responsibility to control pollution so as to mitigate its responsibility under section 110(a)(2)(D). The upwind area should not have to impose draconian controls. As the court in *Michigan v. EPA*, concluded, "there is nothing in the text, structure, or history of section 110(a)(2)(D) that bars EPA from considering cost in its application." 213 F.3d 679. The Court's discussion makes clear that EPA, in interpreting the responsibilities of upwind states under section 110(a)(2)(D), may consider differences in cutback costs in determining what constitutes a significant contribution, and that EPA's inquiry is based on balancing a number of considerations to balance health effects and cost-effectiveness.

EPA's policy does not excuse the upwind areas from fulfilling their obligations under section 110. Upwind areas will be held to section 110 and RACM requirements. EPA has determined the upwind areas' section 110 obligations through the SIP call. The SIP call requires reductions by the date EPA determined was as soon as practicable to eliminate significant contributions to downwind areas.¹ This is coupled with the upwind area's obligation to attain as expeditiously as practicable. It is appropriate to hold downwind areas to the upwind area's attainment date as an outside limit until EPA acts on the upwind area's attainment demonstration. The modeling evidence we have now shows that upwind areas need to come into attainment for the downwind areas of Metropolitan Washington, D.C. and Greater Connecticut to attain the standard.

Comment 11: The section 182(j)(2) "but for" standard applies to intrastate transport. An area must demonstrate that it would have accomplished attainment but for the failure of other areas to implement sufficient controls. The policy is vague, and fails to establish clear standards for a showing of transport. The "affected by transport" standard is unclear.

Response 11: EPA is not constrained by the section 182(j)(2) standard. This section is limited in application to single nonattainment areas that are located in more than one state, and does not address transport coming into an area from another, separate area. Our determinations in the SIP call were clear, and the modeling that resulted from the SIP call effort showed that

¹ Because the D.C. Circuit stayed the obligation of States to submit plans by 13 months, the court also extended by 13 months the date by which sources must implement the necessary controls.

there were significant impacts from upwind areas on the downwind areas, no matter whether one used as a standard the “but for,” “significant contribution” or “affected by transport” formulation. Congress intended that an upwind area that significantly contributes to a downwind area’s nonattainment problem should bear responsibility for that pollution. The modeling shows that significant contributions are made by the upwind areas to the downwind areas seeking attainment date extensions. EPA still believes that Congress would not have intended to impose the burden on downwind areas for an upwind area’s contribution.

Comment 12: Transport is already incorporated into each area’s section 181 design value and thus is assumed in setting the projected attainment date. Congress understood transport resulted in elevated design values, but did not authorize classifications to take into account transport, and provided for reclassification by operation of law based on air quality. In section 181(a)(1), Congress directed that ozone nonattainment areas be placed within certain classifications based solely on their design values, regardless of transport. Congress understood that many areas were classified as moderate or severe at least in part because of ozone transport, but did not grant EPA discretion to take such transport into account when establishing initial classifications under the Act. Why does EPA believe so strongly that its approach is consistent with Congressional intent, given Congress’s refusal to consider transport in establishing the initial classifications and in light of sections 181(b)(2) and 182(i)?

Response 12: The fact that the provisions governing the initial classification process expressly take transport into account in a specific way—see section 181(a)(4)—does not mean that EPA is precluded from taking transport into account when providing for an attainment date extension based on transport, prior to invoking the reclassification provisions. See EPA’s Response to Comment 1. By providing for an extension of the attainment date, EPA is effectuating Congressional intent that the transport relief provisions have a chance to take effect before EPA has an obligation to determine whether the area has attained for purposes of triggering the reclassification provisions.

Comment 13: EPA has previously concluded that reclassification is not a means of penalizing an area, but a

means of providing additional reductions that will benefit public health. EPA rejected the notion that bump-up is a penalty when it reclassified the Phoenix, Arizona area from moderate to serious. There, EPA said:

The classification structure of the Act is a clear statement of Congress’s belief that the later attainment deadlines afforded higher-classified and reclassified areas require compensating increases in the stringency of controls. The reclassification provisions of the Clean Air Act are a reasonable mechanism to assure continued progress toward attainment of the health-based ambient air quality standards when areas miss their attainment deadlines and are not punitive.

Final Rule, 62 FR 60001, 60003 (Nov. 6, 1997). Why has EPA changed its mind about the functions of reclassification?

Response 13: EPA has not changed its mind about the function of the reclassification provision where the issue of transport is not presented. In the context of Phoenix, a reclassification not involving transport, EPA made the response cited by commenter, and noted that the reclassification provision was not intended to be punitive. This view is consistent with the position that EPA takes here, where the circumstances are quite different from the non-transport reclassification context. In the absence of transport, an area that fails to attain by its attainment date, may still fairly be held accountable for controlling local pollution, and be granted a longer attainment deadline in return for more stringent controls. Under these circumstances, applying the reclassification provisions is not punitive. But in the circumstances EPA and the states confront here, the local area is not responsible for pollution that interferes with its ability to meet the standard. In such a case, to trigger reclassification would impose on the area the responsibility and costs for pollution beyond its control, and would indeed be punitive. To avoid such a result, and to effectuate Congressional intent, EPA has interpreted the Act to authorize an attainment date extension.

Comment 14: Congress directly considered and rejected EPA’s interpretation of its attainment date extension authority during the Clean Air Act Amendments of 1990. During debate, Senator Kasten expressed concern about the proposed legislation’s provisions concerning the “issue of downwind ozone nonattainment.” He noted that pollution from Chicago affected southeastern Wisconsin, but described “the difficulty this poses is that the Nation’s most polluted urban

areas are given a much more generous timetable for meeting air-quality standards. Chicago will have 5 more years to meet air-quality standards than these Wisconsin counties will have.” Senator Kasten then noted that because of Chicago’s longer attainment date, it was likely that the Wisconsin counties “will be found in violation of the Clean Air Act because of actions taking place outside of their jurisdiction in an upwind State.”

The commenter claims that Senator Kasten introduced an amendment which provided, among other things, for an attainment date extension for the downwind area until the upwind nonattainment area achieved emission reductions. S. Comm. On Env’t. And Pub. Works, A Legislative History of the Clean Air Act Amendments of 1990, pp. 4954–55 (1993). The commenter claims that “the amendment, was, of course, rejected.” Thus the commenter argues that Congress, although it addressed ozone transport in sections 176A and 184, declined to alter the requirements of section 181, even though it was aware of the problem that EPA seeks to solve with its attainment date extension policy.

Response 14: There is no evidence that the amendment discussed by Senator Kasten was ever debated, considered, or voted upon. Commenter cites no support for the proposition that it was considered and rejected. Thus no inferences can be drawn from the fact that the amendment was not embodied in the statute. Moreover, even if the amendment had been considered and rejected, it differed from and went so far beyond the attainment date extension EPA is applying here as to not be probative of Congressional intent with respect to EPA’s current interpretation of the Act. Among other things, it would have provided for a new and separate Ozone Transport Region, and would have provided for different obligations and consequences for downwind areas than what is contained in EPA’s current interpretation of the attainment date extension policy. Legislative History at 4954–56.

Comment 15: The EPA policy is an illegal expansion of the 1994 overwhelming transport policy. Now the upwind area need not be a nonattainment area with a later attainment date, as long as it is an upwind area in another state that significantly contributes to nonattainment in the downwind area. Also, the new policy would allow attainment even later than attainment for the upwind area if the date for the NO_x SIP call reductions is later. Where

the upwind area is in attainment or where its attainment date is earlier than the NO_x SIP call reductions, then an extension cannot be justified as necessary to reconcile the transport provisions with section 181(a). There is no justification for applying the policy where the upwind area is in attainment, or is in nonattainment but has air quality meeting the NAAQS, or where it is in nonattainment but has an attainment date earlier than the extension proposed.

Response 15: The policy is not an illegal expansion of the overwhelming transport policy, but an appropriate interpretation of the provisions of the Clean Air Act in order to fulfill Congressional intent. EPA's current articulation of the attainment date extension policy reflects the considerable advances in understanding and allocating responsibility for transport that have occurred since the formulation of the Overwhelming Transport Policy. These advances have resulted from the work on ozone transport included in, among other efforts, the OTAG, SIP call, and area modeling programs. EPA thus regards the attainment date extension policy as superseding the Overwhelming Transport Policy. See EPA's earlier responses. The policy is not being applied here so as solely to involve upwind attainment areas, or upwind areas with earlier attainment dates. Upwind attainment areas with deficient SIPs have still been found to contribute significantly to downwind nonattainment. The SIP call involves a statewide area that may include attainment and nonattainment areas that have been found to contribute significantly to downwind nonattainment.

Comment 16: Downwind areas should be required to implement, not just adopt, all required measures before becoming eligible for an extension. Modeling is imprecise and an area might be able to attain if they implement all required measures, which should already have been implemented prior to the original attainment date. A State could have timely submitted all the provisions for control of local pollution as required by sections 182(b)(1)(A)(i), 182(c)(2), and 172(c)(1) providing for the full extent of local reductions that it was in the State's power to require.

Response 16: In granting an attainment date extension for an area, EPA has determined that upwind reductions are necessary to help the area reach attainment. Thus, requiring all local reductions to be implemented

prior to the time that upwind reductions are achieved would not accelerate attainment. Nonetheless, EPA has required that local reductions be implemented as expeditiously as practicable. See EPA's Guidance 61 FR 14441 (March 25, 1999).

Comment 17: EPA's allegation that local measures "will become superfluous once upwind areas reduce their contribution to the pollution problem," 64 FR 14444, is mistaken. First, the measures will produce public health benefits during the period prior to implementation of upwind reductions, and second the Act independently requires all areas to "implement all reasonably available control measures as expeditiously as practicable," 172(c)(1), regardless of what reductions are expected from upwind areas. EPA should not allow downwind areas to postpone implementing local measures until upwind reductions are achieved. This extension is unlawful, and, because unexplained, arbitrary and capricious.

Response 17: EPA disagrees with the commenter's characterization of EPA's actions. EPA is in fact requiring downwind areas to implement the local control measures required under the classification as expeditiously as practicable, but no later than the time the upwind reductions are achieved. See EPA's Guidance, *supra*. To obtain an extension the area must have provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. See also response to Comment 16, above. No measures are being postponed as a result of the areas being granted a later attainment deadlines. None of these areas have delayed or postponed the effectiveness of measures because their attainment date is being extended. The States are enforcing their attainment measures as expeditiously as practicable. Thus EPA's interpretation is not unexplained, arbitrary, nor capricious. As EPA has explained, it seeks to reconcile and coordinate the responsibilities of upwind and downwind areas to work together to achieve attainment. However, as discussed elsewhere, EPA has applied the section 172(c)(1) RACM requirement to these areas.

Comment 18: EPA is excusing downwind areas from the requirement that nonattainment SIPs must provide for attainment of the NAAQS as provided in sections 182(b)(1)(A)(i), 182(c)(2)(A), 172(c)(1), and is also excusing them from the requirement

that they implement all reasonably available control measures as expeditiously as practicable, regardless of the reductions required for attainment. EPA's attempt to lessen these obligations is unlawful and, because unexplained, arbitrary and capricious.

Response 18: EPA is not excusing downwind areas from the requirement that they submit SIPs providing for attainment. Nor is EPA excusing downwind areas from the RACM requirement. EPA's interpretation does not exclude what is necessary for attainment; rather, a measure is RACM if it is needed for attainment. EPA is enforcing this requirement, but allowing the downwind State to take into account the control contribution of upwind areas that Congress envisioned, and that the commenters themselves acknowledge is embodied in Clean Air Act provisions, in determining the applicable attainment date. EPA is also requiring that the States implement reasonable control measures as expeditiously as practicable. See EPA's Responses to other comments.

Comment 19: EPA's policy cannot be defended as a reconciliation of section 181(a) with the Act's anti-transport provisions. Under a proper interpretation of the Act: (1) Upwind States' SIPs would ensure that the upwind areas' pollution contributing to NAAQS violations in downwind areas would be controlled, no later than the downwind areas' attainment date; (2) upwind areas would attain locally as expeditiously as practicable but no later than the date prescribed by section 181(a)(1) for the upwind area; and (3) downwind areas would attain locally "as expeditiously as practicable but not later than" the applicable date prescribed in section 181(a)(1). This reading gives effect to all of the relevant statutory provisions.

Response 19: The commenter concedes that under a proper interpretation of the Act, upwind States' SIPs would ensure that upwind areas' pollution contributing to violations in downwind areas would be controlled, prior to the downwind area's attainment date. But in the circumstances actually confronting EPA and the States, as EPA has explained in prior responses, it was not possible, given the state of knowledge of regional ozone transport, to control upwind transport prior to the original downwind attainment dates set forth in section 181(a)(1). Thus, in order to allow the upwind areas to fulfill their responsibility under the Act and to avoid imposing on the downwind area a burden Congress did not intend, EPA

proposed interpreting the Act to adjust the downwind attainment deadlines, the very interpretation that the commenter rejects as unnecessary. By adjusting the attainment date to allow the upwind and downwind areas to carry out the statutory allocation of responsibility that is acknowledged by the commenter, EPA indeed is reconciling the Act and rendering a proper interpretation.

Comment 20: No extension should be granted unless the area is as small as possible. The basis for transport should not be OTAG modeling, since better data is available.

Response 20: The boundaries for serious nonattainment areas were established by operation of law (CAA section 107(d)(4)). The modeling done by OTAG and by EPA in the SIP call and the local modeling done in connection with the attainment demonstrations represents the best available modeling.

2. Comments Received on 12/16/99 Proposals

Comment 1: The SIP submittals for Springfield, Greater Connecticut and Metropolitan D.C. do not contain substantive additional measures to reduce the State's ground level ozone problem. EPA cannot approve the attainment submittal because, among other reasons, it does not provide for attainment "as expeditiously as practicable," as required by section 181(a) of the CAA. Both the attainment submittal and the proposed rule simply assert that the States, acting alone, cannot achieve attainment, either in 1999 or 2007. Neither the State nor EPA explores the question of what can the State can do, with the help of specified upwind emission reductions, to achieve attainment as expeditiously as practicable. There is no showing that the State could not achieve attainment in 2003 through a combination of local and State measures and the NO_x SIP Call; we only know that the NO_x SIP call is not likely to produce attainment by 2003 without additional local reductions. The SIPs do not meet the requirements of the CAA to provide for attainment as expeditiously as practicable and/or no later than November 15, 1999. States have made no attempt to provide for attainment as soon as possible. Because they do not meet the CAAs requirements for timely attainment, EPA must disapprove them.

Response 1: Congress did not intend for the States to be responsible for achieving attainment, acting alone, when upwind areas are transporting pollution that contributes to their nonattainment problem. EPA has

determined that, under the attainment date extension, the States will attain the standard as expeditiously as practicable. The basis for this determination, and EPA's findings that the area is affected by transport from upwind areas, is discussed extensively in section VI.A.1. EPA has determined that even with the attainment date extension, no reasonably available control measures would advance the attainment date. See other Responses to Comments in section VI.A. and section VI.E.

Comment 2: The State's SIP does not contain adequate contingency measures as required by section 172(c)(9) of the CAA. Such measures are especially important in a case such as this, where a substantial portion of the emission reductions relied on are assumed to occur well into the future, and well beyond the statutory attainment date.

Response 2: Although no measures have been specifically designated as contingency measures, EPA has found that measures that could reasonably constitute appropriate contingency measures are already contained in the SIP or exist in promulgated Federal regulations. See discussion of contingency measures in Section VI.L for each of the attainment date extension areas contained in Responses to Comments.

Comment 3: Even assuming the Transport Guidance is consistent with the Act, the States' attainment submittals do not meet the requirements and/or preconditions necessary to secure adequate emissions reductions from in-State sources. For example, CT and MA could secure further NO_x reductions from power plants and other stationary sources through implementation of RACT on additional stationary sources. The States could secure additional reductions through a diesel inspection and maintenance program.

Response 3: EPA believes that a diesel I/M program may have some potential for emission reductions. At this time, however, there is insufficient information available about the program to determine whether diesel I/M would be economically or technologically feasible. Also, the test protocols are not sufficiently developed to enable EPA to determine the magnitude of reductions possible, and thus whether the program's emission reductions would advance the attainment date. In its other Responses to Comments, EPA has explained and supported its conclusions that the States have adopted and will implement as expeditiously as practicable the measures necessary to secure adequate emissions reductions

from in-State sources. No additional RACM is required for these areas.

Comment 4: The States have failed to timely pursue administrative avenues for States to seek redress for transport problems: Through a section 126 petition and a section 110 SIP call. CT and MA did not file section 126 petitions until the summer of 1997. Even if EPA's transport Guidance were lawful, it should not be applied except as a matter of last resort—the downwind area must have identified and committed to all necessary local measures and exhausted its administrative remedies in a timely fashion to secure all necessary upwind reductions. The States have failed to do that and have waited too long. They want to wait until upwind reductions bring them into attainment without making any additional emission reductions of their own. This is not in keeping with the attainment provisions and schedules in the CAA.

Response 4: EPA disagrees with the commenter that the States have waited too long to seek relief. As set forth in detail in section VI.A.1, the States and EPA have worked for years to solve the transport problem, and were unable to obtain adequate redress for transported pollution until the culmination of the OTAG effort. EPA finds that the States were not dilatory in their efforts to pursue relief from transported pollution; relief was not available until regional transport could be analyzed and responsibility for remediation appropriately apportioned. This effort took years, and was more prolonged than Congress, EPA, or the States had anticipated. See EPA's discussion of the history of the efforts to address transport in section VI.A.1. The States have not failed to pursue any remedies as they became meaningful and available. Nor does EPA agree that its attainment date extension allows the States to wait for upwind reductions without making local emission reductions. EPA's policy is predicated upon an equitable allocation of responsibility between upwind and downwind areas, and explicitly requires the downwind areas to adopt and implement local controls as expeditiously as practicable.

Comment 5: The States have failed to implement all available control measures and have not demonstrated that attainment is impracticable due to pollutant transport. The States have failed to meet the requirement of EPA's transport policy that the States adopt all local measures required under the area's current classification.

Response 5: EPA disagrees with the commenter's contention that the States

being granted attainment date extensions have not satisfied the criterion of adopting required local measures. EPA finds that the States have fulfilled their responsibility with respect to having adopted required local measures. With respect to contingency measures, EPA has determined that measures that can be reasonably construed to function as contingency measures are already contained in the areas' SIPs. See further discussion of the contingency measure requirement in other Responses to Comments. EPA has further found that the States have or will implement required local measures as expeditiously as practicable. With respect to Connecticut, the State has adopted and EPA has approved all measures required under its current classification except with respect to certain aspects of its new source review (NSR) program. Connecticut's nonattainment area NSR program is the one Clean Air Act measure required under the State's classification that EPA has not yet approved as meeting all the requirements of the Act. Nevertheless, EPA has determined that Connecticut's NSR program substantially addresses the Act's requirements and provides a sufficient basis for EPA to apply its attainment date extension policy. The Connecticut NSR program imposes all the Act's requirements on new and modified sources of air pollution for those sources covered by the State's program, including the lowest achievable emissions rate technology standard and emissions offsets consistent with the classification under the Act of the State's two ozone nonattainment areas. In addition, the State's NSR program captures the correct universe of new sources covered by the Act's requirements. The reason Connecticut's program does fully meet all the Act's requirements is that the State's formula for capturing modified sources of air pollution in the program differs from the federal requirements in one respect. EPA's federal NSR regulations generally require that modifications be measured by comparing the actual emissions of the existing facility with the potential emissions of the modified facility. Connecticut's regulations compare the potential emissions of the existing facility with the potential emissions of the modified facility. On the other hand, Connecticut's program is more rigorous than EPA's regulations in measuring a modification in so far as the State's program does not allow for "netting" at a source to avoid being treated as a modification. Federal regulations would allow an increase in emissions at an

existing source to be balanced against contemporaneous emissions decreases elsewhere at the source to avoid NSR, while Connecticut's NSR program does not. On balance, EPA has concluded that the State's NSR program substantially addresses this Clean Air Act requirement for the purposes of granting an attainment date extension under EPA's policy.

EPA thus concludes that substantial compliance with the NSR program and approval of all remaining required measures constitutes substantial compliance with the criterion that the State adopt all measures required under Connecticut's current classification. EPA has further found that it will implement these measures as expeditiously as practicable. Thus, EPA believes that the States have fulfilled their responsibility to satisfy the requirements of their current classification, and that, under these circumstances, Congress would not have intended them to be reclassified for failure to attain.

Comment 6: The States have not shown that they have committed to implement all local measures necessary to secure adequate emissions reductions from in-State sources. They have not shown that a combination of local reductions and upwind reductions will achieve attainment by their extended dates.

Response 6: EPA has found that the States have demonstrated attainment through a combination of upwind and local measures. See other EPA responses and discussion of the attainment demonstration. Secondly, although the States theoretically could always secure more reductions through additional local measures, Congress did not intend that the downwind States compensate for the upwind States failure to control transported pollution. Having met the RACM requirements and controlled for local pollutants, the downwind area should not be required to secure additional emissions reductions in order to offset emissions from upwind sources. As EPA has discussed elsewhere in its responses, the States have committed to implement all measures necessary to secure adequate emissions from in-State sources.

Comment 7: The D.C. Circuit stated in *American Trucking Ass'n v. EPA*, 175 F.3d 1027 (D.C. Cir. 1999) that EPA "is precluded from enforcing a revised primary ozone NAAQS other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2." This means that EPA cannot ignore the attainment dates in Subpart 2.

Response 7: The opinion cited concerns EPA's authority to implement a revised 0.08 ppm 8-hour standard not the standard at issue here—the one-hour 0.12 ppm NAAQS. Regarding EPA's belief that the provisions in Subpart 2 of the Act govern implementation of the one-hour standard, EPA is not ignoring the attainment dates in Subpart 2. EPA is interpreting the provisions of Subpart 2 to allow EPA to extend the attainment deadlines in accordance with Congressional intent and using means set forth in the provisions of Subpart 2. Thus EPA is properly implementing the one-hour standard.

Comment 8: Each serious area plan on its face shows that the control measures described therein will not by themselves produce attainment at any point, and clearly not by 1999. EPA cannot grant credit for SIP call reductions when the SIP call has been judicially stayed.

Response 8: As EPA has explained elsewhere in its responses, Congress did not intend for a downwind area that is affected by transport to be responsible for pollution generated outside its borders. The stay of the SIP call has been vacated and the SIP call has been upheld. The court lifted its stay and States are required to submit SIPs fully addressing the SIP call and if they fail, EPA must promulgate a Federal plan. EPA is fully justified in its reliance on SIP call reductions and in granting credit for them in the areas' attainment demonstrations.

Comment 9: The SIPs fail to provide for attainment as expeditiously as practicable even though this is a serious area where a specific attainment deadline has passed. Furthermore, the States have not even evaluated the possibility of attaining sooner than their extended attainment dates. The SIPs must be disapproved by EPA since they do not meet the CAA's basic requirements for timely attainment nor do they consider the possibility of providing for earlier attainment even if the attainment date extension were permissible.

Response 9: EPA shows in its other Responses, the SIPs provide for attainment as expeditiously as practicable, and the States have shown that they qualify for an attainment date extension due to transport. EPA evaluated the reductions required for attainment from both the upwind and downwind areas, and determined that the attainment dates were as expeditious as practicable. See also Response 11 below.

Comment 10: This is not a situation where the States have adopted all available measures and still show

nonattainment due solely to transport. The States have refused to even identify the levels of VOC and NO_x emissions that would be consistent with attainment in the absence of NO_x reductions that would be required by the NO_x SIP call. Nor do the plans state the level of emission reductions that would be needed to produce attainment in the absence of upwind reductions. EPA cannot rationally find that transported NO_x renders attainment impracticable in the serious areas, when the States have neither quantified the reductions needed locally to attain in the absence of transport reductions, nor shown that such reductions are unachievable through adoption of additional State and local control measures.

Response 10: EPA in its Responses has provided an extensive analysis of the role of transport in downwind nonattainment for the serious areas. In the NO_x SIP call, EPA concluded that "EPA believes that available modeling analyses demonstrate that upwind reductions are necessary to help downwind areas come into attainment." 63 FR 57404 (October 27, 1998). These downwind areas included the areas being granted attainment date extensions here. The D.C. Circuit upheld EPA's conclusion in *Michigan versus EPA*, 213 F.3d 663 (D.C. Cir. 2000). The SIP call and the modeling done by the States support the conclusion that the affected areas cannot attain without upwind reductions. Congress intended that upwind areas be responsible for pollution that interferes with downwind nonattainment, while at the same time requiring that downwind areas be accountable for locally generated emissions. The Clean Air Act reflects Congressional intent that downwind areas not be compelled to compensate for lack of upwind controls through the adoption of additional State and local control measures, as commenter suggests. EPA disagrees with commenter's suggestion that the downwind areas must show that no further local reductions are achievable before relying on upwind areas to shoulder responsibility for the pollution they generate. EPA finds that a reading of the Clean Air Act shows that Congress did not intend for downwind areas to be forced to impose additional local controls to offset significant pollution contributions from upwind areas, before seeking relief.

Comment 11: EPA has not shown that the attainment date extension for Connecticut is justified due to transport.

Response 11: There is strong evidence to support the premise that the Greater

Connecticut nonattainment area is impacted by transport from outside the State, especially New York; and cannot attain without upwind reductions. Sensitivity modeling which removes all emissions from Connecticut indicate transported levels of ozone and its precursors alone generate exceedances in the State of Connecticut. A more focused analysis of days when exceedances occur in Connecticut shows that the majority of these days occur when winds are coming from the southwest and thus carry NO_x and ozone from the New York City metropolitan area and points further west and south. NO_x SIP call and local attainment modeling for the New York and Greater Connecticut nonattainment areas show that the Greater Connecticut nonattainment area will need controls not only local to the Greater Connecticut nonattainment area but from upwind States, especially New York. Local modeling for 2007 relies heavily on the NO_x SIP call reductions (upwind and within the modeling domain) as well as controls being implemented in the New York nonattainment area. It has been clearly demonstrated that, until the New York nonattainment area implements local controls and comes into attainment, high ozone and precursor emissions from the New York nonattainment area have the potential to cause exceedances in the Greater Connecticut nonattainment area.

Comment 12: The Plan fails to demonstrate emission reductions of 3 percent per year over each three-year period after 1999 until attainment. Assuming a 2005 attainment date, the plan must provide for a nine percent reduction in VOC and/or NO_x remissions by 2002 and another 9 percent between 2002 and 2005. The States have not attempted to demonstrate compliance with these requirements, and EPA has not proposed to find that they have been met. EPA has no authority to waive the statutory mandate for three per cent annual reductions. Emission reductions in upwind States do not waive the statutory requirement for 3 percent annual emission reductions within the downwind nonattainment area.

Response 12: EPA's guidance did not interpret the period of time after granting the attainment date extension based on transport as requiring additional rate of progress increments from the downwind area, since we determined that the reason the area had not attained was due to upwind transport. Therefore it would be unreasonable to lock the downwind area into fixed progress requirement

reductions from local sources, when the combination of local reductions with upwind area source emission reductions is what will bring the area into attainment. In any event, to the extent that it should be determined otherwise, and that any ROP required should be imposed on the downwind area, this requirement would not attach until EPA grants the attainment date extension and provides the area with a later attainment date. Since the requirement was not previously due, fulfilling the requirement, if any is deemed to exist, is not a condition of receiving the attainment date extension.

Comment 13: EPA has no legal authority to extend the one-hour attainment date. Such extension is unlawful and unwise. Under the explicit provisions of section 181(a)(1) of the Act, the States are required to attain the one-hour ozone standard as expeditiously as practicable, but no later than November 15, 1999. EPA cannot create exemptions from this requirement.

Response 13: EPA has responded extensively to issues pertaining to the legality of the attainment date extension in its March 1999 responses, above.

B. Attainment Demonstrations—Weight of Evidence

Comment 1: The weight of evidence approach does not demonstrate attainment or meet CAA requirements for a modeled attainment demonstration. Commenters added several criticisms of various technical aspects of the weight of evidence approach, including certain specific applications of the approach to particular attainment demonstrations. These comments are discussed in the following response.

Response 1: Under section 182(c)(2) and (d) of the CAA, serious and severe ozone nonattainment areas were required to submit by November 15, 1994, demonstrations of how they would attain the 1-hour standard. Section 182(c)(2)(A) provides that "[t]his attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective." As described in more detail below, the EPA allows States to supplement their photochemical modeling results, with additional evidence designed to account for uncertainties in the photochemical modeling, to demonstrate attainment. This approach is consistent with the requirement of section 182(c)(2)(A) that the attainment demonstration "be based on photochemical grid modeling,"

because the modeling results constitute the principal component of EPA's analysis, with supplemental information designed to account for uncertainties in the model. This interpretation and application of the photochemical modeling requirement of section 182(c)(2)(A) finds further justification in the broad deference Congress granted EPA to develop appropriate methods for determining attainment, as indicated in the last phrase of section 182(c)(2)(A).

The flexibility granted to EPA under section 182(c)(2)(A) is reflected in the regulations EPA promulgated for modeled attainment demonstrations. These regulations provide, "The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in [40 CFR part 51 Appendix W] (Guideline on Air Quality Models)."² 40 CFR 51.112(a)(1). However, the regulations further provide, "Where an air quality model specified in appendix W * * * is inappropriate, the model may be modified or another model substituted [with approval by EPA, and after] notice and opportunity for public comment * * *." Appendix W, in turn, provides that, "The Urban Airshed Model (UAM) is recommended for photochemical or reactive pollutant modeling applications involving entire urban areas," but further refers to EPA's modeling guidance for data requirements and procedures for operating the model. 40 CFR 51 App. W section 6.2.1.a. The modeling guidance discusses the data requirements and operating procedures, as well as interpretation of model results as they relate to the attainment demonstration. This provision references guidance published in 1991, but EPA envisioned the guidance would change as we gained experience with model applications, which is why the guidance is referenced, but does not appear, in Appendix W. With updates in 1996 and 1999, the evolution of EPA's guidance has led us to use both the photochemical grid model, and additional analytical methods approved by EPA.

The modeled attainment test compares model predicted 1-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. The results may be interpreted through either of two modeled attainment or exceedance tests: a deterministic test or a statistical test.

Under the deterministic test, a predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to not exceed the standard. Under the statistical test, attainment is demonstrated when all predicted (*i.e.*, modeled) 1-hour ozone concentrations inside the modeling domain are at, or below, an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episode modeled).³

In 1996, EPA issued guidance⁴ to update the 1991 guidance referenced in 40 CFR 50 App. W, to make the modeled attainment test more closely reflect the form of the NAAQS (*i.e.*, the statistical test described above), to consider the area's ozone design value and the meteorological conditions accompanying observed exceedances, and to allow consideration of other evidence to address uncertainties in the modeling databases and application. When the modeling does not conclusively demonstrate attainment, EPA has concluded that additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The inherent imprecision of the model means that it may be inappropriate to view the specific numerical result of the model as the only determinant of whether the SIP controls are likely to lead to attainment. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely to be achieved. The process by which this is done is called a weight of evidence (WOE) determination. Under a WOE determination, the state can rely on, and EPA will consider in addition to the results of the modeled attainment test, other factors such as other modeled output (*e.g.*, changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances, and predicted change in the ozone design value); actual observed air quality trends (*i.e.*, analyses of monitored air quality data); estimated emissions trends; and the responsiveness of the model predictions to further controls.

In 1999, EPA issued additional guidance⁵ that makes further use of model results for base case and future emission estimates to predict a future design value. This guidance describes the use of an additional component of the WOE determination, which requires, under certain circumstances, additional emission reductions that are or will be approved into the SIP, but that were not included in the modeling analysis, that will further reduce the modeled design value. An area is considered to monitor attainment if each monitor site has air quality observed ozone design values (4th highest daily maximum ozone using the three most recent consecutive years of data) at or below the level of the standard. Therefore, it is appropriate for EPA, when making a determination that a control strategy will provide for attainment, to determine whether or not the model predicted future design value is expected to be at or below the level of the standard. Since the form of the 1-hour NAAQS allows exceedances, it did not seem appropriate for EPA to require the test for attainment to be "no exceedances" in the future model predictions. The method outlined in EPA's 1999 guidance uses the highest measured design value from all sites in the nonattainment area for each of three years.⁶ The three year "design value" represents the air quality observed during the time period used to predict ozone for the base emissions. This is appropriate because the model is predicting the change in ozone from the base period to the future attainment date. The three yearly design values (highest across the area) are averaged to account for annual fluctuations in meteorology. The result is an estimate of an area's base year design value. The base year design value is multiplied by a ratio of the peak model predicted

⁵ "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: <http://www.epa.gov/ttn/scram>.

⁶ A commenter criticized the 1999 guidance as flawed on grounds that it allows the averaging of the three highest air quality sites across a region, whereas EPA's 1991 and 1996 modeling guidance requires that attainment be demonstrated at each site. This has the effect of allowing lower air quality concentrations to be averaged against higher concentrations thus reducing the total emissions reduction needed to attain at the higher site. The commenter's concern is misplaced. EPA relies on this averaging only for purposes of determining one component, the amount of additional emission reductions not modeled of the WOE determination. The WOE determination, in turn, is intended to be a qualitative assessment of whether additional factors (including the additional emissions reductions not modeled), taken as a whole, indicate that the area is more likely than not to attain.

² The August 12, 1996 version of "Appendix W to Part 51—Guideline on Air Quality Models" was the rule in effect for these attainment demonstrations. EPA is proposing updates to this rule which will not be in effect until the new rule is promulgated.

³ Guidance on the Use Of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA-454/B-95-007, June 1996.

⁴ *Ibid.*

ozone concentrations in the attainment year (*i.e.*, average of daily maximum concentrations from all days modeled) to the peak model predicted ozone concentrations in the base year (*i.e.*, average of daily maximum concentrations from all days modeled). The result is an attainment year design value based on the relative change in peak model predicted ozone concentrations from the base year to the attainment year. Modeling results also show that emission control strategies designed to reduce areas of peak ozone concentrations generally result in similar ozone reductions in all core areas of the modeling domain, thereby providing some assurance of attainment at all monitors.

In the event that the attainment year design value is above the standard, the 1999 guidance provides a method for identifying additional emission reductions, not modeled, which at a minimum provide an estimated attainment year design value at the level of the standard. This step uses a locally derived factor which assumes a linear relationship between ozone and the precursors. Although a commenter criticized this technique for estimating ambient improvement because it does not incorporate complete modeling of the additional emissions reductions, the regulations do not mandate or nor does EPA guidance suggest that States must model all control measures being implemented. Moreover, a component of this technique—the estimation of future design value, should be considered a model predicted estimate. Therefore, results from this technique are an extension of “photochemical grid” modeling and are consistent with section 182(c)(2)(A). Also, a commenter believes EPA has not provided sufficient opportunity to evaluate the calculations used to estimate additional emission reductions. EPA provided a full 60-day period for comment on all aspects of the proposed rule. EPA has received several comments on the technical aspects of the approach and the results of its application, as discussed above and in the responses to the individual SIP’s.

A commenter states that, application of the method of attainment analysis in the December 16, 1999 guidance will yield a lower control estimate than if we relied entirely on reducing maximum predictions in every grid cell to less than or equal to 124 ppb on every modeled day. However, this approach may overestimate needed controls (e.g., the form of the standard allows up to 3 exceedances in 3 years in every grid cell; and if the model over predicts observed concentrations, predicted controls may also be overestimated,

etc.). In recognition of this EPA has considered other evidence to make these determinations, as described above through the weight of evidence determination.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the WOE determination, EPA has made these determinations based on all of the information presented by the States and available to EPA. The information considered includes model results for the majority of the control measures. Though all measures were not modeled, EPA reviewed the model’s response to changes in emissions as well as observed air quality changes to evaluate the impact of a few additional measures, not modeled. EPA’s decision was further strengthened by each State’s commitment to check progress towards attainment in 2003 and to adopt additional measures, if the anticipated progress is not being made.

A commenter further criticized EPA’s technique for estimating the ambient impact of additional emissions reductions not modeled on grounds that EPA employed a rollback modeling technique that, according to the commenter, is precluded under EPA regulations. The commenter explained that 40 CFR 51 App. W section 6.2.1.e. provides, “Proportional (rollback/forward) modeling is not an acceptable procedure for evaluating ozone control strategies.” Section 14.0 of appendix W defines “rollback” as “a simple model that assumes that if emissions from each source affecting a given receptor are decreased by the same percentage, ambient air quality concentrations decrease proportionately.” Under this approach if 20% improvement in ozone is needed for the area to reach attainment, it is assumed a 20% reduction in VOC would be required. There was no approach for identifying NO_x reductions. The “proportional rollback” approach is a purely empirically/mathematically derived relationship, and is not what EPA did. The prohibition in Appendix W applies to the use of a rollback method which is empirically/mathematically derived and independent of model estimates or observed air quality and emissions changes as the sole method for evaluating control strategies. For the demonstrations under proposal, EPA used a locally derived (as determined by the model and/or observed changes in air quality) ratio of change in emissions to change in ozone to estimate additional emission reductions to achieve an additional increment of ambient improvement in ozone. This

did assume a linear relationship between the precursors and ozone for a small amount of ozone improvement. EPA has generally relied on photochemical modeling to evaluate the attainment demonstrations and their control strategies, and has used locally derived adjustment factors as a component to estimate the extent to which additional emissions reductions—not the core control strategies—would reduce ozone levels and thereby strengthen the weight of evidence test. This limited use of adjustment factors is more technically sound than the unacceptable use of proportional rollback. The limited use of adjustment factors is more practical in light of the uncertainty in the modeling, the resources and time required to perform additional modeling, and the requirement that areas perform a progress check by the end of 2003.

Contrary to concerns expressed by a commenter, EPA did not err by modifying the modeling requirements without first proposing to do so. Section 3.0 of appendix W states, “It should not be construed that the preferred models identified here are the only models available for relating emissions to air quality.” Section 3.2.2 of Appendix W further provides that the “determination of acceptability of a model is a Regional Office responsibility. Where the Regional Administrator finds that an alternative model is more appropriate than a preferred model, that model may be used subject to the recommendations in appendix W. This finding will normally result from a determination that: (1) A preferred air quality model is not appropriate for the particular application; or (2) a more appropriate model or analytical procedure is available and is applicable.” Therefore, EPA does have the discretion to identify a more appropriate analytical procedure without undergoing rulemaking on updates to Appendix W. Also, as discussed above, by reference to the modeling guidance, Appendix W was designed to allow changes in the predictive tools and data bases without undergoing additional rulemaking. In any event, the EPA is taking comment during the SIP rulemaking process on the application of its guidance.

A commenter also expressed concern that EPA applied unacceptably broad discretion in fashioning and applying the WOE determinations. EPA disagrees. The WOE determinations are made on a case-by-case basis. EPA has approved attainment demonstrations based on WOE determinations, generally with a requirement for additional reductions not modeled, only when the

photochemical modeling provides a basis for believing that the SIP controls will achieve substantial ozone reductions, if not attainment levels. The fact that the WOE factors are incremental and differ between demonstrations, leads EPA to conclude these determinations may be made on a case-by-case basis, without hard-and-fast guidelines. Moreover, EPA believes that the WOE approach is bounded by the strength of the various factors that may be applied. The commenter added, as an example, EPA's application of the WOE approach to the Washington, D.C. attainment demonstration where modeling showing an ozone level (as adjusted) of 142 ppb was compared to the acceptable upper limit of 137 ppb. The commenter observed that EPA adjusted the modeled prediction on average by a factor of 19% to account for model over prediction, and stated that such an adjustment was not appropriate. In EPA's view, the 19% over prediction that underlies the 142 ppb level is only a rough approximation of the extent of modeling uncertainty. In EPA's view, consideration of model performance (specifically, a bias to under- or over-predict ozone levels) is one way to assess modeling uncertainty. To further address uncertainty, EPA applied the 1999 guidance to estimate the future design, in the same manner as applied to all of the other attainment demonstrations received. Both the assessment of model performance and the estimated future design value were used in the WOE determination.⁷

⁷ Observing that for the attainment demonstration for the Washington, D.C. area, EPA reduced modeled ozone values by 19% to account for model overproduction, a commenter criticized this technique as lacking technical justification. EPA guidance recommends assessment of model performance (both over- and under-prediction) as one of the factors affecting the model results. In general performance measures that fall within EPA recommended ranges are considered as an indication that the model is performing acceptably. For the Washington, D.C. area, EPA explained how performance was more closely reviewed and used as part of the WOE. The technique is described in "Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area," November 30, 1999. The modeled peak ozone results generally correlated (in geographic proximity) with the monitored peak ozone emissions (and the modeled plume generally correlated (in geographic proximity) with the observed ozone plume), except that the peak modeled ozone levels averaged approximately 19–20% higher than the peak monitored levels. Modeling uncertainties (including, for example, the non-linearity of the modeling) lead EPA to conclude that adjusting each modeled peak by the 19% average over-prediction was at least as sensible as adjusting each modeled peak by an amount that corresponds to that modeled peak's relationship to the monitored ozone value in the same vicinity.

The commenter also complained that EPA has applied the WOE determinations to adjust modeling results only when those results indicate nonattainment, and not when they indicate attainment. WOE is not used to adjust model results. WOE is additional analysis that is reviewed when there is reason to question the attainment demonstration. For the current demonstrations under proposal, EPA's decision to approve the demonstrations relied not only on the modeling, but other WOE, as well. For example, EPA considered current air quality, model performance (over- as well as under-prediction), number of episode days, model predicted future design values, and results from the regional modeling for the NO_x SIP call, where applicable. For a given attainment demonstration any one of these elements could have indicated the area may not attain. But collectively the information supported EPA's decision. EPA has applied WOE determinations to all of the current demonstrations under proposal, although except for the Chicago and Milwaukee attainment demonstrations, the modeling results submitted do not pass the recommended "modeled attainment test." Reference the individual proposals for how WOE was applied in each case. These determinations were made based on EPA's best understanding of the problem and relied on a qualitative assessment as well as quantitative assessments of the available information. In some cases, EPA believed the demonstration of attainment was not conclusive, and in these cases EPA made the determination that additional emission reductions were needed to strengthen the demonstration.

The commenter further criticized EPA's application of the WOE determination on grounds that EPA ignores evidence indicating that continued nonattainment is likely, such as, according to the commenter, monitoring data indicate that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM model. EPA did consider the monitoring data along with other information in these determinations. When reviewing the monitoring data, EPA considered other factors. For example, high monitoring values may have occurred for many reasons including, fluctuations due to changes in meteorology and lack of emission reductions. The 1999 monitor values do not reflect several control programs, both local and the regional

which are scheduled for implementation in the next several years. And the 1999 meteorology in the Northeast was such that July 1999 was one of the warmest (ranked 9th) ever experienced since 1895.⁸ In addition to the heat, the middle and southern portions of the Northeast were also drier than average during this month. This information supports EPA's belief that the high exceedances observed in 1999 are not likely to reoccur frequent enough to cause a violation, once the controls adopted in these SIP's are implemented. There is little evidence to support the statement that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM. Since areas did not model 1999 ozone levels using 1999 meteorology and 1999 emissions which reflect reductions anticipated by control measures, that are or will be approved into the SIP, there is no way to determine how the UAM predictions for 1999 compare to the 1999 air quality. Therefore, we can not determine whether or not the monitor values exceed the NAAQS by a wider margin than the UAM predictions for 1999. In summary, there is little evidence to support the conclusion that high exceedances in 1999 will continue to occur after adopted control measures are implemented.

In addition, the commenter argued that in applying the WOE determinations, EPA ignored factors showing that the SIPs under-predict future emissions, and the commenter included as examples certain mobile source emissions sub-inventories. EPA did not ignore possible under-prediction in mobile emissions. EPA is presently evaluating mobile source emissions data as part of an effort to update the computer model for estimating mobile source emissions. EPA is considering various changes to the model, and is not prepared to conclude at this time that the net effect of all these various changes would be to increase or decrease emissions estimates. For attainment demonstration SIPs that rely on the Tier 2/Sulfur program for attainment or otherwise (i.e., reflect these programs in their motor vehicle emissions budgets), States have committed to revise their motor vehicle emissions budgets after the MOBILE6 model is released. EPA will work with States on a case-by-case basis if the new emission estimates raise issues about

⁸ <http://www.ncdc.noaa.gov/ol/climate/research/1999/perspectives.html> and "Regional Haze and Visibility in the Northeast U.S.," NESCAUM at <http://www.nescaum.org/pdf/pubslist.pdf>.

the sufficiency of the attainment demonstration. Corrections, if needed, will be made in time for the progress check in 2003 and if the analysis indicates additional measures are needed, EPA will take the appropriate action.

Comment 2: A commenter states that even with the upwind NO_x reductions anticipated by EPA's proposed NO_x SIP Call, neither photochemical grid modeling conducted by CT and other New England States, nor the so-called "weight-of-evidence" approach demonstrates that CT will achieve attainment by 1999, by 2007 or by any other date. The commenter also states that the "weight of evidence/design value rollback" approach is inconsistent with section 182(c)(2)(A) of the CAA and with EPA guidance and is concerned that the analysis relies on use of air quality design values that are heavily dependent on meteorology and can easily increase.

Response 2: The Connecticut 1-hour ozone attainment demonstration is based on photochemical grid modeling and weight of evidence analyses as recommended in the guidance⁹. Comments on the use of this approach and its consistency with section 182(c)(2)(A) of the CAA are discussed in response 1 above of section VI.B. This guidance allows the use of a WOE analysis to support a modeled control strategy that does not predict concentrations that are at or below the 1-hour ozone NAAQS compliance level of 124 ppb.

EPA agrees that meteorology of any given summer can dictate the ozone design value, because of the unique relationship between elevated ambient ground-level ozone and hot, sunny weather, and in Connecticut, between hot, sunny weather and ozone transported into Connecticut at the surface by southwesterly winds from the major metropolitan areas of New York City, Philadelphia, Baltimore and Washington, plus winds aloft from the NO_x laden Midwest. June and July of 1999 were particularly hot for Connecticut and the ambient ozone levels reflect this. In 1999 the ozone design value for Greater Connecticut, based on 1997–1999 data, is 147 ppb, which reverses a long-term decline in ozone levels dating back to the early 1980's and demonstrates a somewhat extreme increase from 139 ppb in 1998. However, this does not mean attainment predictions of the earlier "weight of evidence" contained in the submittal

are reversed. High monitoring readings may have occurred for many reasons including, fluctuations due to changes in meteorology or lack of additional emission reductions in more recent years.

The 1999 monitor readings do not reflect several control programs relied on for attainment, including both local measures and the regional NO_x SIP call measures which are scheduled for implementation in the future. Therefore assumptions about future air quality based solely on 1999 data are not valid. However, analysis of recent air quality trends predicts that the peak ozone values will be less than 125 ppb and the number of exceedances of the air quality standard will be less than one per year by the year 2005. Since a number of emission control programs, such as the NO_x SIP Call, and Tier 2 car standards are still to be implemented and others, like the OTC NO_x agreement and vehicle inspection and maintenance programs, are still being implemented (i.e., not yet achieving full emissions reduction benefit), emissions of ozone precursors will continue to decrease from now through 2007, producing attainment of the one-hour ozone standard predicted by 2007.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the WOE determination, EPA has made this determination based on all of the information presented by the State and available to EPA. This includes model results for the local control measures and the regional NO_x SIP call along with additional analyses of air quality data and estimates of future design values. Therefore, EPA believes Connecticut will attain the standard, as expeditiously as practicable, through implementation of adopted local controls and regional NO_x reductions.

C. Reliance on NO_x SIP Call and Tier II Modeling

Comment: Given the uncertainty surrounding the NO_x SIP Call at the time of EPA's proposals on the attainment demonstrations, there is no basis for the conclusion reached by EPA that States should assume implementation of the NO_x SIP Call, or rely on it as a part of their demonstrations. The commenter references modeling data which demonstrates that the benefits of imposing NO_x SIP Call controls are limited to areas near the sources controlled.

The commenter adds that there are errors in the emissions used for the NO_x SIP Call Supplemental Notice (SNPR).

The commenter believes that because of inaccurate inventories the modeling analyses, estimates of air quality based on that modeling, and estimates of EPA's Tier II tailpipe emissions reduction program not modeled in the demonstrations, are also flawed.

Response: In *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000), the court upheld the NO_x SIP Call on most issues, although a subsequent order of the court delays the implementation date to no later than May 31, 2004. EPA is moving forward to implement those portions of the rule that have been upheld, ensuring that most—if not all—of the emission reductions from the NO_x SIP call assumed by the States in their 1-hour ozone NAAQS attainment demonstrations will occur. EPA's modeling to determine the region-wide impacts of the NO_x SIP call clearly shows that regional transport of ozone and its precursors is impacting nonattainment areas several States away, and this analysis was upheld by the court. Therefore, it is appropriate for States to assume implementation of the NO_x SIP Call.

The EPA considered many factors when making these determinations. No single piece of information was determinant. It is important to recognize that the regional modeling for the Tier II rule was not used in the 1-hour attainment demonstrations and that the SNPR modeling was only one of several factors considered. EPA's decision was based on a qualitative assessment of the information presented. Information reviewed included results of the modeled attainment test, along with other supplemental information such as other modeled outputs (e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances and predicted changes in the ozone design value); actual observed air quality trends (i.e., analyses of monitored air quality data); estimated emissions trends; base year model performance; SNPR derived future design values; the responsiveness of the model predictions to further controls; and for some of the demonstrations estimates of additional emission reductions. EPA recognizes that any and all of this information has some degree of uncertainty, including the SNPR modeling. EPA recognizes that these uncertainties should be considered when making these determinations and that is why EPA considered other factors. EPA's weight of evidence determinations are not affected by error in any one piece of the information.

⁹Guidance on the Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA-454/B-95-007, June 1996.

D. Impact of the NO_x SIP Call on Attainment of the 1-Hour NAAQS

Comment: One commenter states that Massachusetts's NO_x emissions interfere with attainment in downwind areas of New Hampshire and Maine and that Connecticut's NO_x emissions interfere with attainment in downwind areas of Massachusetts, New Hampshire and Maine. Therefore, the commenter states that significant additional NO_x reductions are needed for these areas to attain the 1-hour ozone NAAQS. The commenter also remarked that neither Massachusetts nor Connecticut has committed to adequate emission control strategies.

Response: In the final rule for the NO_x SIP Call (63 FR 57394, October 27, 1998), EPA indicated that Massachusetts contains sources that contribute significantly to 1-hour nonattainment in Maine and New Hampshire, and that Connecticut contains sources that contribute significantly to 1-hour nonattainment in Massachusetts, Maine and New Hampshire. The NO_x SIP Call rule specified the emissions that Connecticut and Massachusetts were required to regulate to address their significant contribution to nonattainment in these downwind States. Massachusetts submitted a rule meeting the NO_x SIP call on November 19, 1999, and EPA proposed approval of this rule on July 12, 2000 (65 FR 42907). Similarly, Connecticut submitted a rule in response to the NO_x SIP call on October 1, 1999, and EPA proposed approval on July 12, 2000 (65 FR 42900). On October 20, 2000, the Regional Administrator signed notices fully approving these rules. As of December 15, 2000, this approval was awaiting publication. These rules have addressed Massachusetts's and Connecticut's contribution to ozone nonattainment in downwind areas. In addition, recent air quality monitoring data for 1998–2000, which have been quality assured, indicate that the Portland, ME, and Portsmouth-Dover-Rochester, NH, ozone nonattainment areas no longer violate the 1-hour ozone NAAQS.

E. RACM (Including Transportation Control Measures)

1. Comments on December 16, 1999 Proposal

Comment: Several commenters have stated that there is no evidence in several states that they have adopted reasonably available control measures (RACM) or that the SIPs have provided for attainment as expeditiously as practicable. Specifically, the lack of Transportation Control Measures

(TCMs) was cited in several comments, but potential stationary source controls were also covered. One commenter stated that mobile source emission budgets in the plans are by definition inadequate because the SIPs do not demonstrate timely attainment or contain the emissions reductions required for all RACM. That commenter claims that EPA may not find adequate a motor vehicle emission budget (MVEB) that is derived from a SIP that is inadequate for the purpose for which it is submitted. The commenter alleges that none of the MVEBs submitted by the states that EPA is considering for adequacy is consistent with either the level of emissions achieved by implementation of all RACM; nor are they derived from SIPs that provide for attainment. Some commenters stated that for measures that are not adopted into the SIP, the State must provide a justification for why they were determined to not be RACM.

Response: The EPA reviewed the SIP submittals for the four serious areas (Greater Connecticut, Western Massachusetts (Springfield); Washington, D.C.-Virginia-Maryland; and Atlanta, Georgia¹⁰) and determined that they did not include sufficient documentation concerning available RACM measures. Therefore, EPA reviewed numerous potential RACM measures. As part of this review, EPA developed an analysis, which has been placed in the dockets for the SIPs for the serious areas to help address this issue: "RACM Analysis for Four Serious Areas Designated Nonattainment for 1-hr Ozone NAAQS." U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; and Office of Transportation and Air Quality, Ann Arbor, MI 48105. October 12, 2000. An electronic version of EPA's RACM analysis cited above can be downloaded at www.epa.gov/ttn/rto under "What's New." The EPA published a notice of availability of this material on October 16, 2000 (65 FR 61134) and provided initially a 15 day public comment period on the material. The EPA extended the public comment period on this supplemental material for an additional 15 days in a notice published November 2, 2000 (65 FR 65818) and corrected on November 9, 2000 (65 FR 67319).

Section 172(c)(1) of the Act requires SIPs to contain RACM and provides for areas to attain as expeditiously as

¹⁰ This response to comment document will not address Atlanta; that will be addressed in the future when EPA takes final rulemaking action on the Atlanta SIP.

practicable. EPA has previously provided guidance interpreting the requirements of 172(c)(1). See 57 FR 13498, 13560. In that guidance, EPA indicated its interpretation that potentially available measures that would not advance the attainment date for an area would not be considered RACM. EPA also indicated in that guidance that states should consider all potentially available measures to determine whether they were reasonably available for implementation in the area, and whether they would advance the attainment date. Further, states should indicate in their SIP submittals whether measures considered were reasonably available or not, and if measures are reasonably available they must be adopted as RACM. Finally, EPA indicated that states could reject measures as not being RACM because they would not advance the attainment date, would cause substantial widespread and long-term adverse impacts, or would be economically or technologically infeasible. The EPA also issued a recent memorandum re-confirming the principles in the earlier guidance, entitled, "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas." John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

The EPA's RACM analysis cited above evaluated emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationship to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional RACM are available after adoption of Clean Air Act (Act) required measures for the four serious ozone nonattainment areas. The analysis supplemented the December 16, 1999 proposals to approve the 1-hour O₃ NAAQS attainment demonstrations in these areas.

Based on this analysis and other information discussed below, EPA concluded that additional emission control measures would not advance the attainment date and therefore do not constitute RACM in three nonattainment areas: Greater Connecticut; Springfield, Massachusetts; and Metropolitan Washington. The EPA therefore concludes that the SIPs for these areas meet the requirement for adopting RACM.

In addition to control measures already implemented locally, each of the three areas relies in large part on reductions from outside the nonattainment areas from EPA's NO_x SIP call rule or section 126 rule (65 FR 2674, January 18, 2000) to reach attainment. In the NO_x SIP call, 63 FR 57356, EPA concluded that reductions from various upwind States were necessary to provide for timely attainment in nonattainment areas in various downwind States, including all four of the nonattainment areas that were the subject of this analysis. The NO_x SIP call therefore established requirements for control of sources of significant emissions in all upwind States. However, these reductions were not slated for full implementation until May 2003. Further, the United States Court of Appeals for the District of Columbia Circuit recently ordered that EPA could not require SIPs to provide for full implementation of the NO_x SIP call prior to May 2004. *Michigan, et al., v. EPA*, D. C. Cir. No. 98-1497, Order of Aug. 30, 2000.¹¹

The attainment demonstrations for these three serious areas indicate that the ozone benefit expected to be achieved from regional NO_x reductions (such as the NO_x SIP call) are substantial. (See the individual attainment demonstrations in the docket for each of these areas.)

EPA had proposed to approve an attainment date extension beyond the original attainment date specified in the Clean Air Act (November 1999) for each of the three serious areas: to 2007 for Greater Connecticut; to 2003 for Western Massachusetts; and to 2005 for Metropolitan Washington. The rationale for such extensions is discussed in detail extensions elsewhere in this response to comments document. See section VI.A. Briefly, however, the extensions are being given mainly due to the fact that these areas will have to rely on emission reductions from upwind areas. Some of those upwind reductions will be provided under the NO_x SIP call rule with compliance in 2004, and from the section 126 rule, with compliance in 2003. Additional reductions from other nonattainment areas are relied on by the Greater Connecticut area.

Greater Connecticut must rely on reductions from the New York City nonattainment area to reach attainment. The New York nonattainment area—classified severe—has a statutory

attainment date of as late as 2007. The SIP submitted for New York City, which EPA has proposed to approve, establishes a 2007 attainment date. It is unlikely that all the emission reductions necessary to reduce sufficiently upwind emissions to bring Greater Connecticut into attainment will be obtained until the attainment year for New York City and the best available evidence indicates that date will be 2007. EPA's zero out modeling analyses conducted in support of EPA's NO_x SIP call show that even eliminating all of Connecticut's emissions does not help Connecticut attain prior to the time New York City reaches attainment, since the effects of transport are so significant. (See 64 FR 70343.) Therefore, EPA concludes that additional emission reductions within Connecticut would not advance the attainment date for the Greater Connecticut area, and thus that no additional measures are considered RACM.

One could also argue that the measures needed in the upwind area that is affecting the area in question could be implemented earlier and therefore could result in earlier attainment. The EPA recognizes that it has not taken final rulemaking on the severe areas that affect the three serious areas in question (New York for the Greater Connecticut and Western Massachusetts nonattainment areas, and Baltimore for the Metropolitan Washington nonattainment area). However, since EPA must take rulemaking action on the three serious areas at this time, and because it does not have information to the contrary at this point, EPA must presume the attainment dates submitted by the States and for which EPA proposed approval on December 16, 1999, and therefore presume that emission controls for those severe areas will be implemented as expeditiously as practicable on a schedule to achieve those reductions. Because EPA proposed to approve the attainment dates for the severe areas in question, it is reasonable to assume that the severe areas cannot implement their measures to achieve attainment any more expeditiously.

Thus, EPA believes that implementation of additional measures in the Greater Connecticut area will not advance the attainment date, prior to implementation by the upwind area of all local measures needed to attain by the area's attainment date.

Therefore, EPA concludes, based on the available documentation, that the reductions from additional control measures will not advance attainment, and thus none of these potential measures analyzed can be considered

RACM for purposes of section 172(c)(1) for Greater Connecticut for its 1-hour ozone standard attainment demonstration.

Although EPA does not believe that section 172(c)(1) requires implementation of additional measures for these three serious areas, this conclusion is not necessarily valid for other areas. For 1-hour ozone nonattainment areas classified as severe, for instance, some of which are the "upwind" areas referred to in the above responses for serious areas, such measures may in fact be RACM, and the States in which such areas are located have a responsibility to perform an analysis of whether additional measures are RACM. EPA is about to issue additional guidance concerning the RACM requirement for the severe areas. In addition, if in the future EPA moves forward to implement another ozone standard, this RACM analysis would not control what is RACM for these or any other areas for that other ozone standard.

Also, EPA has long advocated that States consider the kinds of control measures that the commenters have suggested, and EPA has indeed provided guidance on those measures. See, e.g., <http://www.epa.gov/otaq/transp.htm>. In order to demonstrate that they will attain the 1-hour ozone NAAQS as expeditiously as practicable, some areas may need to consider and adopt a number of measures—including the kind that EPA itself evaluated in the RACM analysis for the three serious areas—that even collectively do not result in many emission reductions. Furthermore, EPA encourages areas to implement technically available and economically feasible measures to achieve emissions reductions in the short term—even if such measures do not advance the attainment date—since such measures will likely improve air quality. Also, over time, emission control measures that may not be RACM now for an area may ultimately become feasible for the same area due to advances in control technology or more cost-effective implementation techniques. Thus, areas should continue to assess the state of control technology as they make progress toward attainment and consider new control technologies that may in fact result in more expeditious improvement in air quality.

Discussion of other factors related to RACM, such as economic and technological feasibility, are discussed below in responses to comments on EPA's RACM analysis.

Elsewhere in this response to comments, EPA addresses the issue of

¹¹ Several States (DE, PA, CT, MA, RI, MD, NY, NJ) have submitted plans providing for reductions by 2003. EPA has fully approved three of these plans (CT, MA, RI).

whether the attainment dates are as expeditious as practicable and that discussion is not repeated here.

EPA previously responded to comments concerning the adequacy of MVEBs when EPA took final action determining the budgets adequate and does not address those issues again here. The responses are found at <http://www.epa.gov/oms/transp/conform/pastsips.htm>.

Comments on the supplemental material were received from several commenters and are addressed below.

Note that the response to the comment related to severe areas will be provided at the time EPA takes final rulemaking action on those areas.

2. Comments on October 16, 2000 Notice of Availability

Comment 1: EPA cannot invent rationales for the States. EPA's role is limited to reviewing what the states have submitted, and approving or disapproving it. 42 U.S.C. 7410(k)(3); *Riverside Cement Co. v. Thomas*, 843 F.2d 1246 (9th Cir. 1988). EPA "may either accept or reject what the state proposes; but EPA may not take a portion of what the state proposes and amend the proposal ad libitum." *Id.* If states are going to reject control measures, their decision to do so and the rationale therefore must be subject to notice and hearing at the state and local level.

Response 1: The SIP submittals from the States for the Metropolitan Washington, Western Massachusetts, and the Greater Connecticut nonattainment areas contained no measures adopted for the sole purpose of satisfying the RACM requirement. The public did have a chance to comment at the State level on the fact that there were no additional measures. The EPA interpreted this lack of additional measures as an indication that the State did not identify any additional measures as meeting the RACM requirement under section 172(c)(1). The EPA did not amend the SIP; EPA supplemented the rationale and approved the SIP with an explanation of why it was acceptable for the State to identify no additional measures to meet the RACM requirement of the Clean Air Act.

The commenter cites *Riverside Cement* for the proposition that EPA cannot perform an analysis of whether the State's plan complies with the CAA's RACM requirement. The EPA believes that the holding of that case is inapplicable to these facts. In *Riverside Cement*, EPA approved a control requirement establishing an emission limit into the SIP and disregarded a

contemporaneously-submitted contingency that would allow the State to modify the emission limit. Thus, the court concluded that EPA "amended" the State proposal by approving into the SIP something different than what the State had intended. 843 F.2d at 1248. In the present circumstances, EPA did not attempt to modify a substantive control requirement of the submitted plan. Rather, EPA performed additional analyses to determine if the plan, as submitted, fulfilled the substantive RACM requirement of the Act. As a general matter, EPA believes that States should perform their own analyses of RACM (as well as submitting other supporting documents for the choices they make). The statute places primary responsibility on the States to submit plans that meet the Act's requirements. However, nothing in the Act precludes EPA from performing those analyses, and the Act clearly provides that EPA must determine whether the State's submission meets the Act's requirements. Under that authority, EPA believes that it is appropriate, though not mandated, that EPA perform independent analyses to determine whether a submission meets the requirements of the Act. The EPA has not attempted to modify the State's submission by either adding or deleting a substantive element of the submitted plan. By virtue of the supplemental RACM analysis, EPA has concluded that the State's initial submission contains control measures sufficient to meet the RACM requirement.

Comment 2 (a): Inappropriate grounds for rejecting RACM. The commenter claims that EPA's bases for rejecting measures as RACM are inappropriate considerations: (a) The measures are "likely to require an intensive and costly effort for numerous small area sources"; or (b) the measures "do not advance the attainment dates" for the four areas. 65 Fed. Reg. at 61134. Neither of these grounds are legally or rationally sufficient bases for rejecting control measures.

Response 2(a): The EPA's approach toward the RACM requirement is grounded in the language of the Clean Air Act. Section 172(c)(1) states that a SIP for a nonattainment area must meet the following requirement, "In general.—Such plan provisions shall provide for the implementation of *all reasonably available control measures as expeditiously as practicable* (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall *provide*

for attainment of the national primary ambient air quality standards." [Emphasis added.] The EPA interprets this language as tying the RACM requirement to the requirement for attainment of the national primary ambient air quality standard. The Act provides that the attainment date shall be "as expeditiously as practicable but no later than * * *" the deadlines specified in the Act. EPA believes that the use of the same terminology in conjunction with the RACM requirement serves the purpose of specifying RACM as the way of expediting attainment of the NAAQS in advance of the deadline specified in the Act. As stated in the "General Preamble" (57 FR 13498 at 13560, April 16, 1992), "The EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area *as components of the area's attainment demonstration.*" [Emphasis added.] In other words, because of the construction of the RACM language in the CAA, EPA does not view the RACM requirement as separate from the attainment demonstration requirement. Therefore, EPA believes that the Act supports its interpretation that measures may be determined to not be RACM if they do not advance the attainment date. In addition, EPA believes that it would not be reasonable to require implementation of measures that would not in fact advance attainment. See 57 FR 13560.

The term "reasonably available control measure" is not actually defined in the definitions in the Act. Therefore, the EPA interpretation that potential measures may be determined not to be RACM if they require an intensive and costly effort for numerous small area sources is based on the common sense meaning of the phrase, "reasonably available." A measure that is reasonably available is one that is technologically and economically feasible and that can be readily implemented. Ready implementation also includes consideration of whether emissions from small sources are relatively small and whether the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. As stated in the General Preamble, EPA believes that States can reject potential measures based on local conditions including cost. 57 FR 13561.

Also, the development of rules for a large number of very different source categories of small sources for which little control information may exist will likely take much longer than

development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules in the three nonattainment areas would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from upwind controls, such as from the NO_x SIP call and controls from severe areas with later statutory attainment dates.

Comment 2(b): EPA's approach also illegally assumes that the attainment dates for these areas can be extended beyond November 15, 1999 via the Agency's downwind transport policy.

Response 2(b): As noted above, EPA concluded that RACM is linked in the language of the Clean Air Act to the attainment date. We elsewhere respond to comments that object to EPA's approval of attainment date extensions and do not restate those responses here. See Section A. Once an attainment date is set for an area, an analysis can then be made to determine whether any additional measures that may potentially be RACM would advance that attainment date.

Comment 3: Failure to quantify reductions needed to attain sooner. Even if advancement of the attainment date were a relevant test for RACM, EPA has failed to rationally justify its claim that additional control measures would not meet that test. To begin with, neither the Agency nor the states have quantified in a manner consistent with EPA rules and guidance the emission reductions that would be needed to attain the standard prior to achievement of emission reductions required under the NO_x SIP call.

Response 3: Elsewhere in this response to comments on the proposed approval of the 1-hour ozone SIPs, EPA addresses the issue of the attainment date extension. See Section VI.A. EPA has therein justified the position that areas affected by transport may need additional time to attain—and in some cases may need an extension out to either the date the NO_x SIP call will be implemented or the attainment date of an upwind area if it cannot attain without the reductions from the upwind area. In the case of Greater Connecticut, it would be futile to perform analyses of whether additional emission reductions in the nonattainment area—whether RACM or beyond RACM—would advance the attainment date when it is already demonstrated through modeling that the area cannot attain sooner than the upwind New York City

nonattainment area that needs to control. In addition, all local measures needed for attainment are already being implemented. EPA considers this implementation as expeditious as practicable. Issues concerned with timing of implementation of additional measures are also discussed above.

The regulation Connecticut adopted to meet EPA's NO_x SIP call requires compliance with covered emission reductions in 2003, which EPA considers as expeditiously as practicable for those sources.

Comment 4: Inadequate RACM analysis. EPA's RACM analysis is grossly inadequate in several key respects.

Comment 4(a): EPA's analysis fails to provide the technical basis and calculations by which it developed its emission reduction estimates for various measures. EPA failed to provide citations to the literature regarding estimates of emission reductions for various TCMs. EPA failed to specify the level of implementation assumed for some of the TCMs in the analysis.

Response 4(a): EPA's RACM analysis (found at www.epa.gov/ttn/rto) did provide the technical basis and calculations for its emission reduction estimates for controls possible for the source categories in the emission inventory. The commenter apparently believes EPA's analysis is insufficient, however. The technical basis for the analyses and the assumptions used in the calculation of estimated emission reductions were derived from a review of the literature on the implementation and effectiveness of TCM's.¹² The TCMs evaluated depend on the level of implementation. Implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Comment 4(b): EPA's analysis looks at only a small universe of potential measures, and does not evaluate all of the measures identified in public comment and other sources.

¹² Transportation Control Measures: State Implementation Plan Guidance, US EPA 1992; Transportation Control Measure Information Documents, US EPA 1992; Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature, National Association of Regional Councils 1994.

Response 4(b): EPA's RACM analysis was intended to address all potential categories of stationary and mobile sources that could provide additional emission reductions that might be considered RACM. The EPA believes that all identified measures were included in the categories addressed in the analysis.

Comment 4(c): EPA's analysis also completely fails to consider the additional benefits likely from combined implementation of complementary TCMS, e.g., parking management along with transit improvements. It is arbitrary and irrational for EPA to assume that these measures can and will be implemented in complete isolation from one another.

Response 4(c): EPA recognizes that many control measures—particularly TCMS—are more effective if done in conjunction with others. EPA maintains, however, that it would be impossible to analyze a seeming infinite set of combinations of measures for possible benefits. The EPA's analysis did look at all measures in various categories and concluded that as a whole these categories of measures would not advance attainment or would otherwise not be reasonably available.

Comment 5: Stationary sources. The analysis of potential emission reductions from additional stationary source measures is flawed in several key respects.

Comment 5(a): First, EPA arbitrarily excluded from any consideration the bottom 20% of the stationary source categories.

Response 5(a): EPA does not consider this exclusion arbitrary, since it was designed to eliminate from consideration controls on a number of source categories that were not expected to yield many emission reductions. The EPA believed that controls on categories with very low emission reduction potential would not constitute RACM. The fact that none of the top 80 percent of the categories considered for additional controls yielded measures that EPA considered RACM for the areas in question validates EPA's decision not to analyze separately the bottom 20 percent of the categories, which would cumulatively have achieved fewer emission reductions. Therefore, EPA concludes that control measures applied to the bottom 20 percent of the categories are also not RACM.

Comment 5(b): Second, EPA did not consider potential additional controls on electric generating units and point source combustion sources.

Response 5(b): Undoubtedly there are additional controls that could be placed

on electric generating units and point source combustion sources. However, EPA believes that the implementation of the RACT requirements in nonattainment areas and, more importantly, the implementation of the NO_x SIP call in all areas affecting the nonattainment areas in general provide a level of control that represents all reasonably available controls for these sources in the areas in question. The EPA believes that generally, the level of NO_x emissions control required under the NO_x SIP call for larger sources, including electric generating units and point source combustion sources, is greater than the level of control presumed by EPA under the NO_x RACT requirement. The NO_x SIP call is based on a level of highly cost effective controls, characterized as having a \$2000 per ton cost effectiveness or less (63 FR 57400, October 27, 1998). The presumptive level of RACT provided in EPA guidance is based on cost effectiveness up to \$1300 per ton (Memorandum of March 16, 1994, from D. Kent Berry re: "Cost-Effective Nitrogen Oxides (NO_x) Reasonably Available Control Technology (RACT)"). EPA acknowledges that controls with costs higher than \$2000 per ton are available and may be cost-effective. However, the control costs do not reflect other concerns regarding reasonableness of control. EPA received comments that predicted problems with availability of electrical generation even at the NO_x SIP call level of control; therefore, in its final NO_x SIP call rule, EPA included provisions for a NO_x supplement pool to allow more time for some units to come into compliance and thus minimize potential power availability problems. At control levels greater than those in the NO_x SIP call rule, EPA believes the time States would need to provide for sources to come into compliance while avoiding power availability problems would be more than the current amount of time for Western Massachusetts and Metropolitan Washington to attain. Therefore, EPA had determined that such additional controls do not constitute RACM.

Comment 5(c): Third, EPA assumes that only a 50% level of control is achievable for the uncontrolled emissions. This completely unsupported claim is hard to fathom.

Response 5(c): EPA's long-standing guidance on the RACT requirement for stationary sources of VOC has generally assumed a presumptive norm of 81 percent control efficiency; this efficiency was based on the assumption of a 90 percent capture efficiency and 90 percent control efficiency of the

captured emissions ($0.9 \times 0.9 = 0.81$). However, the specific VOC RACT control techniques guidelines were developed for emission sources for which much information about emissions and controls was available. The RACT rules often apply to smaller sources as well as to major sources. There is not nearly as much information available concerning source categories for which RACT guidelines have not been developed; nor is there information regarding what controls are appropriate for the smaller sources that are not already subject to RACT. Therefore, without further information, EPA was hesitant to assume an 81 percent level of control. EPA therefore chose a 50 percent level of control for VOC control, which EPA believes is reasonable in light of our limited knowledge on available controls.

The EPA established guidance to States in complying with the Clean Air Act's requirements for NO_x RACT in the NO_x Supplement to the General Preamble (57 FR 55620, November 25, 1992). That guidance addressed RACT for major stationary sources of NO_x. Under section 182(b)(2) of the Act, moderate and higher ozone nonattainment area SIPs—and also SIPs for all areas in the Ozone Transport Region—were already required to contain provisions for applying a reasonably available level of control for NO_x for major stationary sources. For NO_x emission control for other sources, when EPA published the NO_x SIP call (63 FR 57402, October 27, 1998), EPA evaluated other levels of control for categories of stationary sources that were not included in the highly cost-effective controls assumed for establishing the level of control reflected in the Statewide NO_x emission budgets in that rule. The EPA determined that for area sources, additional controls that were technologically feasible and highly cost-effective could not be identified. The EPA determined that for small point sources, their collective emissions were relatively small and the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. Nonetheless, for the purpose of the RACM analysis, EPA did assume a level of control for sources with potential for control. In light of the lower level of confidence in information concerning NO_x controls on these sources, and the conclusion concerning cost effectiveness, however, EPA believed it had to take a more conservative approach, and thus chose a lower level of control, namely 50

percent. The EPA believes this level is reasonable in light of these facts.

Comment 6: Transportation Control Measures as RACM: EPA gives virtually no consideration to the emission reduction benefits of transportation programs, projects and services contained in adopted regional transportation plans (RTPs), or that are clearly available for adoption as part of RTPs adopted for a nonattainment area. In addition, it is arbitrary and capricious for EPA not to require as RACM economic incentive measures that are generally available to reduce motor vehicle emissions in every nonattainment area.

Response 6: EPA's notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) does consider transportation programs, projects and services that are generally adopted, or available for inclusion in a nonattainment area's regional transportation plan (RTP) and Transportation Improvement Program (TIP). The RACM analysis includes seven broad categories and twenty-seven subcategories of Transportation Control Measures (TCMs) that represent a range of programs, projects and services that can be included in RTP's and TIP's. The inclusion of a TCM in an RTP or TIP does not necessarily mean that it meets EPA's criteria for RACM and must be included in the SIP. EPA has concluded that implementation of these TCM's would not advance the attainment date for the Greater Connecticut area, and therefore are not considered RACM for purposes of the attainment SIPs for that area.

Some of these TCM's, such as parking cashout, transit subsidies, and parking pricing, are explicitly economic incentive programs. Furthermore, these categories of TCMs, as well as most of the others, could be infinitely differentiated according to criteria, such as the method of implementation, level of promotional effort or market penetration, stringency of enforcement, etc. The application of economic incentives to increase the effectiveness of a TCM is one such criterion. These implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Also, there are many important reasons why a state, regional, or local planning agency might implement TCMs in an integrated traffic management plan beyond whatever air quality benefits the TCMs might generate, including preserving open space, water shed protection, avoiding sprawl, mitigating congestion, and "smart growth" planning generally. So the fact that TCMs are being implemented in certain ozone nonattainment areas does not necessarily lead one to the conclusion that those TCMs represent mandatory RACM measures when they are analyzed primarily for the purpose of determining whether they would advance the ozone attainment date.

Comment 7: EPA did not provide sufficient notice and time to permit adequate comment.

Response 7: In its initial notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) EPA offered a 15 day comment period (to October 31, 2000). On November 2, 2000 (65 FR 65818), EPA extended the comment period an additional 15 days, specifically stating that this would provide a total of 30 days for public comment. Unfortunately, that notice was published with a typographical error that appeared to extend the comment period an additional year and 15 days. Therefore, on November 9, 2000 (65 FR 67319), EPA published a correction to clearly extend the comment period 15 days from October 31, 2000, to November 15, 2000. EPA believes 30 days is an adequate period for public comment. The first notice to extend the public comment period (the November 2, 2000 notice) made it quite clear that the extension was for only 15 days to provide a total of 30 days for comment; EPA believes no possible confusion should have resulted from the fact that the end date of the comment period contained a typographical error.

Comment 8: EPA is trying to circumvent obligations under 2 Consent Decrees (*MOG v. EPA* and *NRDC v. Browner*).

Response 8: This comment refers to consent decrees filed in two cases: *NRDC v. Browner*, No. 99-2976 (D.D.C.) and *Midwest Ozone Group v. EPA*, No. 00-1047 (D.D.C.). In *NRDC*, the consent decree provides that by November 15, 2000, EPA shall propose a federal implementation plan (FIP) for the Springfield, Massachusetts; Greater Connecticut; and Metropolitan Washington D.C. nonattainment areas if EPA has not approved full attainment demonstration SIP for that area. The consent decree for *Midwest Ozone*

Group is similar, but not identical. It provides that EPA shall propose federal implementation plans (FIPs) for two of the three nonattainment areas—Springfield, Massachusetts and Greater Connecticut—if EPA has not proposed approval of a full attainment demonstration SIP for that area. The EPA met its obligation under the *Midwest Ozone Group* decree when it proposed approval of the full attainment demonstration SIPs for those two areas on Dec. 16, 1999. 64 FR 70319 and 64 FR 70332. On November 6, 2000, the District Court granted EPA's unopposed motion to extend the deadline for action under the *NRDC* decree until December 15, 2000 for each of the three areas. On December 7, 2000, the court further extended the date for EPA action with respect to Springfield until December 22, 2000. The EPA has complied with the *NRDC* consent decree with respect to the Greater Connecticut and Metropolitan Washington D.C. areas. The appropriate Regional Administrator signed a final rulemaking action approving the full attainment demonstration SIPs for those two areas by December 15, 2000. The EPA is on track to comply with the *NRDC* consent decree for the Springfield, Massachusetts nonattainment area by December 22, 2000.

Comment 9: Since EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA must disapprove the SIPs and propose a FIP.

Response 9: Although EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA believes it does have authority to supplement the record and conclude that the SIPs for these two areas meet the RACM requirement of the Act. See above the response to comment.

F. Reliance on Commitments and State Rules Not Yet Adopted

Comment: Several commenters disagreed with the EPA's proposal to approve attainment demonstrations and rate-of-progress plans for the Springfield, Massachusetts, Greater Connecticut, and Metropolitan Washington, DC ozone nonattainment areas because not all of the emissions reductions credited in the demonstrations or plans are supported by legally enforceable limitations adopted and approved by the state or District and approved by the EPA as part of the SIP. Commenters also objected to accepting enforceable state commitments to adopt emission reduction control measures in the future in lieu of current adopted measures.

Response: The EPA has approved previously, or is approving together with the attainment demonstrations, all outstanding emission reduction limitations relied on for attainment for these three areas. Thus, none of the three areas on which the EPA is approving have commitments to adopt emission reduction measures in the future and all emission reductions rules relied on for attainment have been fully approved by the EPA.

G. Adequacy of Motor Vehicle Emissions Budgets

Comment: We received a number of comments about the process and substance of EPA's review of the adequacy of motor vehicle emissions budgets for transportation conformity purposes.

Response: EPA's adequacy process for the Greater Connecticut area has been completed, and we have found the motor vehicle emissions budgets in the SIPs to be adequate. We have already responded to any comments related to adequacy when we issued our adequacy finding, and therefore we are not listing the individual comments or responding to them here. Our finding of adequacy for the Greater Connecticut transportation conformity budgets can be found at <http://www.epa.gov/oms/transp/conform/ct-resp.wpd>. A copy of the response to comments is available at http://www.epa.gov/oms/transp/conform/resp_ct.pdf.

H. Rate of Progress Motor Vehicle Emissions Inventory

Comment: Several commenters stated that the motor vehicle emissions inventory is not current, particularly with respect to the fleet mix. Commenters stated that the fleet mix does not accurately reflect the growing proportion of sport utility vehicles and gasoline trucks, which pollute more than conventional cars. Also, a commenter stated that EPA and States have not followed a consistent practice in updating SIP modeling to account for changes in vehicle fleets. For these reasons, commenters recommend disapproving the SIPs.

Response: The Connecticut SIP we are taking final action on is based on the most recent vehicle registration data available at the time the SIP was submitted. The Connecticut SIP is based on vehicle registration data from 1996, which is the most recent data available at the time the SIP was submitted. The SIP also contains vehicle fleet characteristics that are in the most recent periodic inventory update, which was submitted on March 13, 2000. EPA requires the most recent available data

to be used, but we do not require it to be updated on a specific schedule. Therefore, different SIPs base their fleet mix on different years of data. Our guidance does not suggest that SIPs should be disapproved on this basis. Nevertheless, we do expect that revisions to these SIPs that are submitted using MOBILE6 (as required in those cases where the SIP is relying on emissions reductions from the Tier 2 standards) will use updated vehicle registration data appropriate for use with MOBILE6, whether it is updated local data or the updated national default data that will be part of MOBILE6.

I. VOC Emission Reductions

Comment: For States that need additional VOC reductions, this commenter recommends a process to achieve these VOC emission reductions, which involves the use of HFC-152a (1,1 difluoroethane) as the blowing agent in manufacturing of polystyrene foam products such as food trays and egg cartons. HFC-152a could be used instead of hydrocarbons, a known pollutant, as a blowing agent. Use of HFC-152a, which is classified as VOC exempt, would eliminate nationwide the entire 25,000 tons/year of VOC emissions from this industry.

Response: EPA has met with the commenter and has discussed the technology described by the company to reduce VOC emissions from polystyrene foam blowing through the use of HFC-152a (1,1 difluoroethane), which is a VOC exempt compound, as a blowing agent. Since the HFC-152a is VOC exempt, its use would give a VOC reduction compared to the use of VOCs such as pentane or butane as a blowing agent. However, EPA has not studied this technology exhaustively. It is each State's prerogative to specify which measures it will adopt in order to achieve the additional VOC reductions it needs. In evaluating the use of HFC-152a, States may want to consider claims that products made with this blowing agent are comparable in quality to products made with other blowing agents. Also the question of the over-all long term environmental effect of encouraging emissions of fluorine compounds would be relevant to consider. This is a technology which States may want to consider, but ultimately, the decision of whether to require this particular technology to achieve the necessary VOC emissions reductions must be made by each affected State. Finally, EPA notes that under the significant new alternatives policy (SNAP) program, created under CAA § 612, EPA has identified

acceptable foam blowing agents many of which are not VOCs (<http://www.epa.gov/ozone/title6/snap/>).

J. Credit for Measures Not Fully Implemented

Comment: States should not be given credit for measures that are not fully implemented. For example, the States are being given full credit for Federal coating, refinishing and consumer product rules that have been delayed or weakened.

Response: Architectural and Industrial Maintenance (AIM) Coatings: On March 22, 1995 EPA issued a memorandum¹³ that provided that States could claim a 20% reduction in VOC emissions from the AIM coatings category in ROP and attainment plans based on the anticipated promulgation of a national AIM coatings rule. In developing the attainment and ROP SIPs for their nonattainment areas, States relied on this memorandum to estimate emission reductions from the anticipated national AIM rule. EPA promulgated the final AIM rule in September 1998, codified at 40 CFR Part 59 Subpart D. In the preamble to EPA's final AIM coatings regulation, EPA estimated that the regulation will result in 20% reduction of nationwide VOC emissions from AIM coatings categories (63 FR 48855). The estimated VOC reductions from the final AIM rule resulted in the same level as those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, States have assumed a 20% reduction from AIM coatings source categories in their attainment and ROP plans. AIM coatings manufacturers were required to be in compliance with the final regulation within one year of promulgation, except for certain pesticide formulations which were given an additional year to comply. Thus all manufacturers were required to comply, at the latest, by September 2000. Industry confirmed in comments on the proposed AIM rule that 12 months between the issuance of the final rule and the compliance deadline would be sufficient to "use up existing label stock" and "adjust inventories" to conform to the rule. 63 FR 48848 (September 11, 1998). In addition, EPA determined that, after the compliance date, the volume of nonconforming products would be very low (less than one percent) and would be withdrawn

from retail shelves anyway. Therefore, EPA believes that compliant coatings were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

Autobody Refinish Coatings Rule: Consistent with a November 27, 1994 EPA policy,¹⁴ many States have claimed a 37% reduction from this source category based on a proposed rule. However, EPA's final rule, "National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings," published on September 11, 1998 (63 FR 48806), did not regulate lacquer topcoats and will result in a smaller emission reduction of around 33% overall nationwide. The 37% emission reduction from EPA's proposed rule was an estimate of the total nationwide emission reduction. Since this number is an overall national average, the actual reduction achieved in any particular area could vary depending on the level of control which already existed in the area. For example, in California the reduction from the national rule is zero because California's rules are more stringent than the national rule. In the proposed rule, the estimated percentage reduction for areas that were unregulated before the national rule was about 40%. However as a result of the lacquer topcoat exemption added between proposal and final rule, the reduction is now estimated to be 36% for previously unregulated areas. Thus, most previously unregulated areas will need to make up the approximately 1% difference between the 37% estimate of reductions assumed by States, following EPA guidance based on the proposal, and the 36% reduction actually achieved by the final rule for previously unregulated areas.

Consumer Products Rule: Consistent with a June 22, 1995 EPA guidance,¹⁵ States have claimed a 20% reduction from this source category based on EPA's proposed rule. The final rule, "National Volatile Organic Compound Emission Standards for Consumer Products," (63 FR 48819), published on September 11, 1998, has resulted in a 20% reduction after the December 10, 1998 compliance date. In the consumer products rule, EPA determined and the consumer products industry concurred,

¹⁴ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rule and the Autobody Refinishing Rule," November 27, 1994, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

¹⁵ "Regulatory Schedule for Consumer and Commercial Products under section 183(e) of the Clean Air Act," June 22, 1995, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

¹³ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rules," March 22, 1995, from John S. Seitz, Director, Office of Air Quality Planning and Standards to Air Division Directors, Regions I-X.

that a significant proportion of subject products have been reformulated in response to State regulations and in anticipation of the final rule. 63 FR 48819. That is, industry reformulated the products covered by the consumer products rule in advance of the final rule. Therefore, EPA believes that complying products in accordance with the rule were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

K. Enforcement of Control Programs

Comment: The attainment demonstrations do not clearly set out programs for enforcement of the various control strategies relied on for emission reduction credit.

Response: State enforcement program elements are contained in SIP revisions previously approved by EPA under obligations for enforceable emission limitations set out in section 110 of the Clean Air Act. Once approved by the EPA, there is no need for states to readopt and resubmit their enforcement programs with each and every SIP revision generally required by other sections of the Act.

L. Contingency Measures

Comment: The SIP for the Greater Connecticut designated ozone nonattainment area does not provide contingency measures to make up for any emission reduction shortfall, either in achievement of ROP milestones or for failure to attain, as required by sections 172(c)(9) and 182(c)(9) of the Clean Air Act.

Response: The EPA believes the contingency measure requirements of Sections 172(c)(9) and 182(c)(9) are independent requirements from the attainment demonstration requirements under §§ 172(c)(1) and 182(c)(2)(A) and the rate-of-progress (ROP) requirements under Sections 172(c)(2) and 182(c)(2)(B). The contingency measure requirements are to address the event that an area fails to meet a ROP milestone or fails to attain the ozone NAAQS by the attainment date established in the SIP. The contingency measure requirements have no bearing on whether a state has submitted a SIP that projects attainment of the ozone NAAQS or the required ROP reductions toward attainment. The attainment or ROP SIP provides a demonstration that attainment or ROP requirements ought to be fulfilled, but the contingency measure SIP requirements concern what is to happen only if attainment or ROP is not actually achieved. The EPA acknowledges that contingency measures are an independently required

SIP revision, but does not believe that submission of contingency measures is necessary before EPA may approve an attainment or ROP SIP. Also see the discussion of contingency measures in the extension of the attainment date policy section VI.A.

The EPA has, however, examined the ROP and attainment SIPs for Greater Connecticut nonattainment area. The following summarizes the EPA's findings for the Greater Connecticut area.

The Greater Connecticut post-1996 ROP plan, contains contingency measures for purposes of meeting missed ROP milestones. The EPA approved this plan on October 19, 2000. 65 FR 62624. The attainment demonstration SIP for this area does not specify any specific measures as contingency measures. After 2007, the attainment date that EPA is approving for the area, there are a number of EPA measures that will achieve significant emission reductions that the SIP does not rely on or take credit for. These include continuing reductions from EPA's Tier 2 tailpipe standards and EPA's standards for a variety of non-road sources. The EPA has analyzed the Greater Connecticut SIP and has estimated that the contingency obligation would be approximately 10.5 tons per summer day (tpsd) in ozone precursor emission reductions. Reductions from the federal non-road and the Tier 2 tailpipe standards during the time frame contingency measures would need to be implemented for failure to attain (i.e., by May 2009) ¹⁶ are estimated to be at least 12.1 tpsd, which would cover the contingency obligation for this area. More details on EPA's contingency measure analysis are included in the docket for the rulemaking action. While there is not an approved SIP contingency measure that would apply if the state failed to attain, EPA believes that existing federally enforceable measures would provide the necessary substantive relief.

M. Motor Vehicle Emission Budgets and MOBILE6

Comment 1: In their August 28, 2000 letter, Environmental Defense (ED) generally supports a policy of requiring motor vehicle emissions budgets to be recalculated when revised MOBILE models are released.

Response 1: The Greater Connecticut attainment demonstration, which relies on Tier 2 emission reduction credit,

¹⁶ EPA policy provides that contingency measures should achieve a 3 percent reduction in emissions in the year following an EPA determination of a failure to attain or to meet a progress requirement.

contains a commitment to revise the motor vehicle emissions budgets after MOBILE6 is released.

Comment 2: The revised budgets calculated using MOBILE6 will likely be submitted after the MOBILE5 budgets have already been approved. EPA's policy is that submitted SIPs may not replace approved SIPs.

Response 2: This is the reason that EPA proposed in the SNPR (65 FR 46383) that the approval of the MOBILE5 budgets for conformity purposes would last only until MOBILE6 budgets had been submitted and found adequate. In this way, the MOBILE6 budgets can apply for conformity purposes as soon as they are found adequate.

Comment 3: If a State submits additional control measures that affect the motor vehicle emissions budget but does not submit a revised motor vehicle emissions budget, EPA should not approve the attainment demonstration.

Response 3: EPA agrees. The motor vehicle emissions budgets in the Greater Connecticut attainment demonstration reflect the motor vehicle control measures in the attainment demonstration.

Comment 4: EPA should make it clear that the motor vehicle emissions budgets to be used for conformity purposes will be determined from the total motor vehicle emissions reductions required in the SIP, even if the SIP does not explicitly quantify a revised motor vehicle emissions budget.

Response 4: EPA will not approve SIPs without motor vehicle emissions budgets that are explicitly quantified for conformity purposes. The Greater Connecticut attainment demonstration contains explicitly quantified motor vehicle emissions budgets which EPA has found adequate (65 FR 37778).

Comment 5: If a state fails to follow through on its commitment to submit the revised motor vehicle emissions budgets using MOBILE6, EPA could make a finding of failure to submit a portion of a SIP, which would trigger a sanctions clock under section 179.

Response 5: EPA agrees that if a state fails to meet its commitment, EPA could make a finding of failure to implement the SIP, which would start a sanctions clock under section 179 of the Clean Air Act.

Comment 6: If the budgets recalculated using MOBILE6 are larger than the MOBILE5 budgets, then attainment should be demonstrated again.

Response 6: As EPA proposed in its December 16, 1999 notices, we will

work with States on a case-by-case basis if the new emissions estimates raise issues about the sufficiency of the attainment demonstration.

Comment 7: If the MOBILE6 budgets are smaller than the MOBILE5 budgets, the difference between the budgets should not be available for reallocation to other sources unless air quality data show that the area is attaining, and a revised attainment demonstration is submitted that demonstrates that the increased emissions are consistent with attainment and maintenance. Similarly, the MOBILE5 budgets should not be retained (while MOBILE6 is being used for conformity demonstrations) unless the above conditions are met.

Response 7: EPA agrees that if recalculation using MOBILE6 shows lower motor vehicle emissions than MOBILE5, then these motor vehicle emission reductions cannot be reallocated to other sources or assigned to the motor vehicle emissions budget as a safety margin unless the area reassesses the analysis in its attainment demonstration and shows that it will still attain. In other words, the area must assess how its original attainment demonstration is impacted by using MOBILE6 vs. MOBILE5 before it reallocates any apparent motor vehicle emission reductions resulting from the use of MOBILE6. However, if the state is not required to remodel with MOBILE6 because the attainment demonstration does not rely on Tier II reductions, the conformity rules do require the use of MOBILE6 for conformity after any established grace period even if the SIP is based on MOBILE5. The state is not required to revise the SIP merely because a new mobile model becomes available.

N. MOBILE6

Comment 1: We received a comment on whether the grace period before MOBILE6 is required in conformity determinations will be consistent with the schedules for revising SIP motor vehicle emissions budgets ("budgets") within 1 or 2 years of MOBILE6's release. This commenter was concerned that MOBILE6 could be required for conformity before new budgets were submitted based on MOBILE6.

Response 1: The MOBILE6 grace period for conformity determinations is a separate requirement that is not explicitly tied to EPA's SIP policy and approvals. However, it is important to note that the transportation conformity rule requires EPA to consider many factors in establishing the length of the grace period before MOBILE6 is required in conformity, including the

degree of change in emissions models and scope of re-planning likely to be necessary by transportation agencies (40 CFR 93.111). The grace period must be between 3–24 months, and EPA understands that a longer grace period would allow some areas to better transition to new MOBILE6 budgets. EPA will be taking the 1–2 year period provided for in the SIP approvals into account in establishing an appropriate grace period for conformity.

Comment 2: One commenter asked EPA to clarify in the final rule whether MOBILE6 will be required for conformity determinations once new MOBILE6 budgets are submitted and found adequate. The commenter wanted clarification on the case where the MOBILE6 conformity grace period ends before new budgets are submitted based on MOBILE6. The commenter thought that this situation could necessitate the use of the emission reduction tests (e.g., build/no-build test) for conformity analyses, instead of using the budgets based on MOBILE5b. The commenter stated that using the build/no-build test instead of existing budgets that are based on MOBILE5b is less appropriate for air quality planning purposes.

Response 2: The transportation conformity rule requires adequate budgets to be used in regional emissions analysis, when they exist, regardless of what emissions model was used to establish the budgets. In the example highlighted by the commenter, the MOBILE5b budgets would be required for conformity purposes if they were the only applicable budgets at the end of the MOBILE6 grace period. Thus, the conformity analysis would compare future reductions under a proposed transportation plan or TIP calculated with MOBILE6 against the SIP budgets developed with MOBILE5. This has always been required by the conformity rule once the grace period for a new model has passed. Once budgets have been established, the build/no-build test is no longer applicable. See 40 CFR 93.111 of the transportation conformity rule. During the grace period, areas should use the consultation process to address any future conformity impacts of using the new emissions model.

Comment 3: One commenter did not prefer the additional option for a second year before the state has to revise the conformity budgets with MOBILE6, due to several concerns. The commenter cited that the air agency did not select this option and had already submitted a commitment to revise the conformity budgets with MOBILE6.

Response 3: EPA proposed the additional option to provide further

flexibility in managing MOBILE6 budget revisions. The supplemental proposal did not change the original option to revise budgets within one year of MOBILE6's release. State and local governments can continue to use the 1-year option, if desired, or submit a new commitment consistent with the alternative 2-year option.

O. NO_x Emissions Budget

Comment: Since Connecticut and Massachusetts are significant contributors to other States' ozone nonattainment, EPA should require Connecticut and Massachusetts to make necessary reductions to attain the ozone standard within their States and neighboring States. The commenter objected to allowing Connecticut to increase its NO_x emissions budget.

Response: The states of Connecticut, Massachusetts and Rhode Island all submitted their SIPs in response to the NO_x SIP call in late 1999, and EPA proposed approval of them all on July 12, 2000 (at 65 FR 42900, 65 FR 42907, and 65 FR 42913 for CT, MA and RI, respectively). No public comments were received on those proposals. On October 20, 2000, final approval of Connecticut, Massachusetts and Rhode Island NO_x SIP call SIPs was granted by EPA Region I's Regional Administrator. Approval of the SIPs will be codified at 40 CFR 52.370(c)(86) for Connecticut, 40 CFR 52.1120(c)(124) for Massachusetts, and Table C of 40 CFR 52.2070 for Rhode Island. In our final approval, we said that we have determined the SIP revisions for these three states meet the air quality objectives of the NO_x SIP call requirements EPA has published to date. Thus, we believe that Connecticut and Massachusetts have already adopted adequate emission control strategies to address 1-hour ozone transport for downwind areas. Furthermore, EPA has previously determined each of the 1-hour ozone nonattainment areas in eastern New England (i.e., Providence, Rhode Island; Boston-Lawrence-Worcester, Massachusetts-New Hampshire; Portsmouth-Dover-Rochester, New Hampshire; Manchester, New Hampshire; Cheshire County, New Hampshire; Portland, Maine; Lewiston-Auburn, Maine, and Knox and Lincoln Counties, Maine) to have air quality meeting the 1-hour ozone standard. (See final actions published on June 5, 1998 (63 FR 31014), and June 9, 1999 (64 FR 30911).) Based on final data for some areas and preliminary data for others, EPA expects each of these areas to continue to meet the 1-hour ozone standard for the years 1998 through 2000.

Furthermore, in February 1999, CT, MA, RI, and EPA signed a memorandum of understanding (i.e., "the Three State MOU") agreeing to redistribute the EGU portions of the three states' budgets, as well as the compliance supplement pool allocations, amongst themselves. Under the MOU, the combined 2007 controlled emission level and compliance supplement pool did not change for the three states, only the individual state EGU allocations and supplement pools were redistributed to provide additional flexibility among these three states. EPA supports this concept because such a redistribution is no different than the effects of trading.

When EPA reviewed whether each state was meeting the objectives of the NO_x SIP call, we considered the adopted 2007 emission budgets and adopted NO_x reducing measures in CT, MA and RI together and found them as meeting the air quality objectives of the NO_x SIP Call. The issue of whether the redistribution was appropriate was considered and decided during the rulemaking approving the NO_x SIPs.

P. Lack of Fully Approved Rules

Comment: Connecticut only has conditional approval of VOC RACT rules for VOC for non-CTG categories, and Connecticut does not have fully approved post-1996 ROP plans.

Response: That is no longer true. EPA fully approved the Connecticut VOC RACT rules pursuant to sections 182(b)(2)(A) and (C) of Clean Air Act on October 19, 2000 (65 FR 62620). EPA fully approved the 9 percent rate of progress plans for both of Connecticut's ozone nonattainment areas on October 19, 2000 (65 FR 62624).

Other information and rationale for EPA's action are explained in the NPR and will not be restated here.

Final Action: As described above, EPA does not believe any of the comments received on the proposals published for the attainment demonstration and attainment date extension for the Greater Connecticut area change the basis for our proposed approval. Thus, EPA is approving the ground-level one-hour ozone attainment demonstration SIP for the Greater Connecticut area. EPA is also approving the attainment date extension for this area until November 15, 2007. This revision also approves the 2007 volatile organic compound (VOC) and nitrogen oxide (NO_x) motor vehicle emissions budgets for the Greater Connecticut serious ozone nonattainment area for use in transportation conformity. Lastly, EPA is approving the commitment made by Connecticut to revise their VOC and NO_x transportation conformity budgets

within one year of the release of MOBILE6, and the commitment to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007, and submit the results to EPA by December 31, 2003.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any State implementation plan. Each request for revision to the State implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

III. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement

for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 5, 2001. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: December 15, 2000.

Mindy S. Lubber,

Regional Administrator, EPA-New England.

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart H—Connecticut

2. Section 52.374 is amended by revising the table to read as follows:

§ 52.374 Attainment dates for national standards.

* * * * *

Air quality control region	Pollutant					
	SO ₂		PM ₁₀	NO ₂	CO	O ₃
	Primary	Secondary				
AQCR 41: Eastern Connecticut Intrastate (See 40 CFR 81.183)	(a)	(b)	(a)	(a)	(a)	(d)
AQCR 42: Hartford-New Haven-Springfield Interstate Area (See 40 CFR 81.26)						
All portions except City of New Haven	(a)	(b)	(a)	(a)	(a)	(d)
City of New Haven	(a)	(b)	(c)	(a)	(a)	(d)
AQCR 43: New Jersey-New York-Connecticut Interstate Area (See 40 CFR 81.13)	(a)	(a)	(a)	(a)	(a)	(d)
AQCR 44: Northwestern Connecticut Intrastate (See 40 CFR 81.184)	(a)	(b)	(a)	(a)	(a)	(d)

- a. Air quality levels presently below primary standards or area is unclassifiable.
b. Air quality levels presently below secondary standards or area is unclassifiable.
c. December 31, 1996 (two 1-year extensions granted).
d. November 15, 2007.

3. Section 52.377 is amended by designating the existing text as paragraph (a) and by adding paragraph (b) to read as follows:

§ 52.377 Control strategy: Ozone.

* * * * *

(b) Approval—Revisions to the State Implementation Plan submitted by the Connecticut Department of Environmental Protection on September 16, 1998 and February 8, 2000. The revisions are for the purpose of satisfying the attainment demonstration requirements of section 182(c)(2)(A) of

the Clean Air Act for the Greater Connecticut serious ozone nonattainment area. The revision establishes an attainment date of November 15, 2007 for the Greater Connecticut serious ozone nonattainment area. This revision establishes motor vehicle emissions budgets for 2007 of 30.0 tons per day of volatile organic compounds (VOC) and 79.6 tons per day of nitrogen oxides (NO_x) to be used in transportation conformity in the Greater Connecticut serious ozone nonattainment area, until revised budgets pursuant to MOBILE6

are submitted and found adequate. In the revision, Connecticut commits to revise their VOC and NO_x transportation conformity budgets within one year of the release of MOBILE6. Connecticut also commits to conduct a mid-course review to assess modeling and monitoring progress achieved towards the goal of attainment by 2007, and submit the results to EPA by December 31, 2003.

[FR Doc. 01-62 Filed 1-2-01; 8:45 am]

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Federal Register

**Wednesday,
January 3, 2001**

Part VII

Environmental Protection Agency

40 CFR Part 52

**Approval and Promulgation of Air Quality
Implementation Plans; One-Hour Ozone
Attainment Demonstration and
Attainment Date Extension for the
Springfield (Western Massachusetts)
Ozone Nonattainment Area; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[MA069-7205; A-1-FRL-6927-6]

Approval and Promulgation of Air Quality Implementation Plans; Massachusetts; One-Hour Ozone Attainment Demonstration and Attainment Date Extension for the Springfield (Western Massachusetts) Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revision submitted by the Commonwealth of Massachusetts. This action approves Massachusetts One-hour Ozone Attainment Demonstration for the Springfield (Western Massachusetts) ozone nonattainment area and extends the attainment date for this area until December 31, 2003. A notice of proposed rulemaking was published on this action on December 16, 1999 (64 FR 70319). EPA received comments on that proposal. In this action, EPA responds to those comments.

EFFECTIVE DATE: This rule will become effective on February 2, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection by appointment weekdays from 9 a.m. to 4 p.m., at the Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA-New England, One Congress Street, 11th floor, Boston, MA; Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, Room M-1500, 401 M Street, (Mail Code 6102), S.W., Washington, D.C.; and Division of Air Quality Control, Department of Environmental Protection, One Winter Street, 8th Floor, Boston, MA 02108.

FOR FURTHER INFORMATION CONTACT: Richard P. Burkhart, (617) 918-1664.

SUPPLEMENTARY INFORMATION: This supplementary information section is organized as follows:

- I. What Massachusetts SIP revision is the topic of this action?
- II. What previous action has been taken on this SIP revision?
- III. When did EPA make a determination regarding the adequacy of the Motor Vehicle Emissions Budgets for the Springfield, MA area?
- IV. What are the requirements for full approval of the attainment demonstration?
- V. How did Massachusetts fulfill these requirements for full approval?

VI. What SIP elements did EPA need to take action on before full approval of the attainment demonstration could be granted?

VII. What comments were received on the proposed approvals and how has EPA responded to those?

VIII. EPA Action

IX. Administrative Requirements

I. What Massachusetts SIP Revision Is the Topic of This Action?

An attainment demonstration SIP was submitted on July 27, 1998 by the Massachusetts Department of Environmental Protection for the Springfield, Massachusetts one-hour ozone nonattainment area. The SIP revision was subject to public notice and comment by the State and a hearing was held in June 1998. On October 1, 1998, Massachusetts submitted its motor vehicle emissions budgets for the Springfield nonattainment area for use in transportation conformity. Massachusetts also requested an attainment date extension for this area on August 13, 1999. The state requested a new attainment date of December 2003, which EPA interprets as December 31, 2003.

II. What Previous Action Has Been Taken on This SIP Revision?

EPA published a Notice of Proposed Rulemaking (NPR) for the Massachusetts attainment demonstration SIP on December 16, 1999 (64 FR 70319). In that action, EPA proposed to approve the ozone attainment demonstration submitted by the state and proposed to approve an attainment date extension for the Springfield, Massachusetts nonattainment area to December 31, 2003. EPA also proposed, in the alternative, to disapprove the attainment demonstration if Massachusetts did not submit certain additional items, as explained in section IV below. On December 16, 1999, EPA also proposed to approve or conditionally approve and disapprove in the alternative attainment demonstration SIPs for nine other areas in the eastern United States (64 FR 70317).

On February 22, 2000 (65 FR 8703), EPA published a notice of availability on guidance memoranda relating to the ten one-hour ozone attainment demonstrations (including Springfield, Massachusetts) proposed for approval or conditionally approval on December 16, 1999. The guidance memoranda are entitled: "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations," dated November 3, 1999, and "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions

for Ozone Nonattainment Areas," dated November 30, 1999.

On July 28, 2000 (65 FR 46383), a notice of supplemental proposed rulemaking was published relating to the ten one-hour ozone attainment demonstrations (including Springfield, Massachusetts) proposed for approval or conditional approval on December 16, 1999. In the supplemental notice, EPA clarified and expanded on two issues relating to the motor vehicle emissions budgets in the attainment demonstration SIPs. In addition, EPA reopened the comment period to take comment on those two issues and to allow comment on any additional materials that were placed in the dockets for the ten proposed actions close to or after the initial comment period closed on February 14, 2000.

On October 16, 2000 (65 FR 61134), another notice of supplemental proposed rulemaking was published to provide further support for the proposed attainment demonstration published on December 16, 1999 for the four serious ozone nonattainment areas (which includes Springfield, Massachusetts). In this supplemental notice, EPA made available an analysis it had performed to evaluate emission levels of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional reasonably available control measures (RACM) are available after adoption of Clean Air Act (CAA) required measures in the four serious ozone nonattainment areas (i.e., Greater Connecticut; Western, Massachusetts; Washington, D.C.; and Atlanta, Georgia). As explained in the supplemental notice, EPA performed this analysis in response to comments that were submitted on the proposals on these areas' one-hour ozone attainment demonstrations. Originally, EPA established a comment period for this supplemental proposal ending on October 31, 2000. A notice extending the comment period on the October 16, 2000 notice was published on November 2, 2000 (65 FR 65818). Due to a typographical error in the November 2, 2000 notice an additional notice clarifying the close of the comment period was published on November 9, 2000 (65 FR 67319).

Comments received on all of the proposed notices listed in this section relevant to the Springfield, Massachusetts attainment demonstration and attainment date

extension are discussed in section VII. below.

III. When Did EPA Make a Determination Regarding the Adequacy of the Motor Vehicle Emissions Budgets for the Springfield, MA Area?

Massachusetts submitted motor vehicle budgets to EPA on October 1, 1998. The motor vehicle emissions

budgets were calculated to be consistent with requirements Massachusetts is relying on in its attainment demonstration for the Springfield, Massachusetts area. The motor vehicle emissions budgets for 2003 for VOC and NO_x submitted by Massachusetts are shown in Table 1.

TABLE 1.—2003 TRANSPORTATION CONFORMITY BUDGETS

One-hour Ozone Nonattainment Area	VOC (tons/day)	NO _x (tons/day)
Springfield, Massachusetts	23.77	49.11

EPA sent a letter to Massachusetts on February 19, 1999 finding these budgets adequate for use in transportation conformity determinations. On June 10, 1999 (64 FR 31217), EPA notified the public that we had found the 2003 VOC and NO_x motor vehicle emission budgets submitted by Massachusetts on October 1, 1998 adequate for conformity purposes. These budgets became effective on February 19, 1999. In today's action, EPA is approving these budgets into the SIP.

IV. What Are the Requirements for Full Approval of the Attainment Demonstration?

In the NPR for the Massachusetts attainment demonstration SIP published on December 16, 1999, EPA also proposed to disapprove, in the alternative, the attainment demonstration; if Massachusetts did not submit: (a) Revisions to the Massachusetts stage II vapor recovery rules that were committed to in the July 27, 1998 attainment demonstration and (b) the demonstration described in EPA's supplementary proposed approval of the Massachusetts 15% rate-of-progress plan published in the **Federal Register** on November 30, 1999 (64 FR 66829), requiring Massachusetts to demonstrate that the emission reduction credit it is claiming for its I/M program in the Springfield, Massachusetts attainment demonstration is warranted for the combination of test type and equipment that Massachusetts is implementing. As discussed in section V below, Massachusetts satisfied these requirements and has avoided a disapproval of its attainment demonstration for Springfield, Massachusetts.

Massachusetts submitted a commitment with its July 27, 1998 attainment demonstration committing to assess the progress and implementation of the state and federal measures necessary for attainment. Massachusetts

committed to perform this assessment by November, 2001. EPA required such a commitment for an early assessment (or mid-course review) of progress toward attainment. Massachusetts has met this requirement, with its July 27, 1998 submittal.

V. How Did Massachusetts Fulfill These Requirements for Full Approval?

Massachusetts submitted the stage II vapor recovery regulation revisions that were committed to in their July 27, 1998 attainment demonstration on August 9, 2000. A notice proposing approval of the revised stage II vapor recovery regulation was published August 21, 2000 (65 FR 50669). In that notice, EPA stated that it believed that with the revised Stage II regulation, along with the resources DEP is currently devoting to Stage II enforcement, the assumed level of SIP credit from the stage II program will be achieved. EPA approved the revised Stage II regulations on December 18, 2000 (65 FR 78974).

On November 15, 2000 (65 FR 68898), EPA granted a limited approval of the Massachusetts inspection and maintenance program as a revision designed to strengthen the Massachusetts SIP. The action made the I/M SIP revisions submitted on May 14, 1999, February 1, 2000 and March 15, 2000 an enforceable part of the Massachusetts SIP. On November 16, 2000 (65 FR 69254), EPA published a direct final rule converting the limited approval for Massachusetts' enhanced vehicle inspection and maintenance program to a full approval. In that action, EPA approved an interim level of emission reduction credit for the inspection and maintenance program that can be utilized by Massachusetts in attainment planning. EPA approval of an interim level of emission reduction credit was based on additional information that became available which allowed the Agency to exercise engineering judgement in estimating the

credit level of the Massachusetts I/M program. EPA approved a level of credit equivalent to ASM2 at final cut points, which is equivalent to the level of credit Massachusetts needs to support their attainment demonstration.

As mentioned in section IV, Massachusetts submitted a commitment with its July 27, 1998 attainment demonstration to assess the progress and implementation of the state and federal measures necessary for attainment. Massachusetts committed to perform this assessment by November, 2001. EPA required such a commitment for an early assessment (or mid-course review) of progress toward attainment. Massachusetts has met this requirement, with its July 27, 1998 submittal.

VI. What SIP Elements Did EPA Need To Take Final Action on Before Full Approval of the Attainment Demonstration Could Be Granted?

In the NPR for the Massachusetts attainment demonstration SIP published on December 16, 1999, EPA stated that it intends to publish final rulemaking on the 15% VOC reduction plan and 9% rate of progress plan through 1999, the enhanced inspection and maintenance program, and the NO_x SIP call SIP for Springfield, Massachusetts either before or at the same time as publication of final approval of the attainment demonstration.

EPA fully approved the Springfield, Massachusetts area's 15% VOC reduction plan and 9% rate of progress plan on November 15, 2000 (65 FR 68896). As explained previously, EPA published a direct final rule converting the limited approval for Massachusetts' enhanced vehicle inspection and maintenance program to a full approval on November 16, 2000 (65 FR 69254). The final approval of the Massachusetts NO_x SIP call SIP was granted by EPA Region I's Regional Administrator on October 20, 2000. As of December 21, 2000, this approval was awaiting publication. The approved SIP Call rule

will be promulgated at 40 CFR 52.1120(c)(124). Additionally, EPA approved the Massachusetts new source review permitting regulation on October 27, 2000 (65 FR 64360).

VII. What Comments Were Received on the Proposed Approvals and How Has EPA Responded to Those?

EPA received comments from the public on the Notice of Proposed Rulemaking published on December 16, 1999 (64 FR 70319) for the Springfield, Massachusetts area's ozone attainment demonstration. Comments were received from the Conservation Law Foundation; Robert E. Yuhnke (Attorney for Environmental Defense and Natural Resources Defense Council); the Midwest Ozone Group; and ELM Packaging Company. Prior to the publication of the NPR, we also received comments from the Law Office of Bulkley, Richardson and Gelinas, LLP; and the City of Holyoke's Mayor's Industrial Development Advisory Committee. Those letters were both in support of the state's request for an attainment date extension and no response is necessary. For the specific comments received on the December 16, 1999 proposal, the following discussion summarizes and responds to those comments. For convenience, the comments have been grouped into categories.

EPA also received comments from the public on the supplemental proposed rulemaking published on July 28, 2000 (65 FR 46383), in which EPA clarified and expanded on two issues relating to the motor vehicle emissions budgets in the attainment demonstration SIPs. Comments were received from Environmental Defense. The following discussion also summarizes and responds to the these comments.

Lastly, EPA received comments from the public on the supplemental proposed rulemaking published on October 16, 2000 (65 FR 61134) to support the proposed attainment demonstration published on December 16, 1999. In that notice, EPA made available an analysis it had performed to evaluate emission levels of oxides of nitrogen and volatile organic compounds and their relationships to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. Comments applicable to the Springfield, Massachusetts nonattainment area were received from the Midwest Ozone Group and the Massachusetts Department of Environmental Protection. The following discussion

summarizes and responds to these comments as well.

A. Attainment Date Extension Policy

In these responses, EPA addresses both the comments received on this rulemaking and those received in Docket A-98-47 on its notice regarding "Extension of Attainment Dates for Downwind Transport Areas" 64 Fed. Reg. 12221 (March 25, 1999), insofar as here relevant. This includes responses to comments filed by EarthJustice and incorporated by reference in later comments filed on proposed EPA actions on the individual areas. General comments on the policy are considered first. Then specific comments as applied to the area are addressed.

1. Comments Received in Response to March 1999 Notice

Comment 1: EPA does not have the legal authority to extend the attainment deadline for serious areas until hoped-for NO_x reductions occur from upwind states in response to the NO_x SIP call and/or section 126 actions. Such an extension is not authorized by any provision of the statute. It is not within EPA's discretion to extend the attainment dates for downwind areas classified as moderate or serious. The CAA does not authorize EPA to extend attainment deadlines. Congress provided express attainment deadlines in the Clean Air Act, and EPA is without authority to create exemptions from them. Section 181 provides the only exception to the general rule that areas must meet their attainment dates, and is the exclusive remedy. Section 181(a)(5) allows a one-year extension if the state has complied with all requirements and commitments in the applicable SIP and had no more than one exceedance in the attainment year. In section 181(a)(5), Congress provided other authority for extending attainment dates, but not to address effects of transport. See sections 181(a)(5). Section 181(b)(2)(A) requires reclassification for failure to attain by the attainment date. Section 182 requires submissions of attainment plans by the applicable attainment date. EPA's policy violates these express provisions. The statutory deadlines for attainment, the requirement that SIPs adopt measures adequate to provide for attainment by the statutory deadlines, the statutory limitation on EPA's authority to extend attainment dates under section 181(b), and the procedures to be followed in the event an area fails to attain by the deadline are unequivocal and unambiguous, and compliance is required under step one of Chevron. The extension policy is inconsistent with

sections 182(b)(1)(A), 182(c)(2)(A) and 172(c)(1), which require each nonattainment area to provide for attainment and submit SIPs providing for attainment by the applicable deadline. There is no exemption from these mandates for downwind areas that can attain through local reductions, but find it difficult to do so. The EPA policy is also inconsistent with the Phoenix reclassification action, which stated that EPA had no flexibility to provide for attainment date extensions in that circumstance. In section 181(i) Congress refused to give EPA authority to extend attainment dates in light of reclassification.

Response 1: The absence of an express provision in the Clean Air Act for an attainment date extension based on transport does not deprive EPA of the authority to interpret the CAA to permit such an extension. Nor do the specific attainment date extension provisions in the statute preclude EPA's interpreting the statute to allow for an extension to account for upwind transport that has interfered with downwind attainment. This interpretation is necessary to prevent the thwarting of Congressional intent not to unfairly burden downwind areas. In various parts of the statute, Congress expressed an intent to accomplish this through provisions prohibiting transport, but these provisions failed to achieve the Congressional goal in time to allow the downwind areas to meet their originally prescribed attainment dates.

The provisions of section 182 governing reclassification also do not prohibit EPA from interpreting the CAA to provide for an attainment date extension based on transport. EPA's policy of extending attainment dates for ozone nonattainment areas affected by transport of ozone and ozone precursors represents a reasonable effort to avoid the frustration of Congressional intent to which a literal application off the reclassification provisions would lead. Where a "literal reading of the statute would actually frustrate the congressional intent supporting it, [a court may uphold] an interpretation of the statute more true to Congress's purpose." *EDF v. EPA*, 82 F.3d 451, 468 (D.C. Cir. 1996).

In 1990, Congress established a classification scheme for ozone nonattainment areas that provided for those areas to be classified on the basis of the severity of their ozone problems and for areas with more serious problems to be given more time to attain, but also required to implement more control measures. As part of these provisions, Congress enacted the reclassification provisions under which

ozone nonattainment areas that failed to attain the ozone standard as of their attainment dates were to be reclassified to a higher classification, thereby receiving an extension of their attainment date, but also being subjected to additional control requirements. See section 181(b)(2).

On their face, the reclassification provisions do not provide for any exemption from the reclassification process for areas affected by ozone transport from other States. However, EPA believes that, in light of developments since the enactment of the 1990 Clean Air Act Amendments, a literal application of those provisions to such areas would frustrate broader congressional intent. In this context it is important to recognize that, apart from the ozone reclassification provisions, the CAA contains a provision—section 110(a)(2)(D)—that obligates upwind states to prohibit pollution—including ozone and its precursors—from sources within the state that contribute significantly to nonattainment and maintenance problems in downwind states. Congress was cognizant of the need to control such emissions, and of the inequities between upwind and downwind sources that could result if upwind states did not impose emission controls on their sources that contribute to downwind air quality problems. Congress thus sought to establish a regime that would eliminate such inequities.

The legislative history of the 1977 Clean Air Act Amendments regarding the enactment of section 110(a)(2)(E), the predecessor of section 110(a)(2)(D), and section 126 (a provision that allows EPA to directly regulate sources that significantly contribute to nonattainment in another state) clearly demonstrates this. The Senate Committee Report criticized the lack of effective “interstate abatement procedures” and “interstate enforcement actions” under existing law, which the Committee viewed as “resulting in serious inequities among several States, where one State may have more stringent implementation plan requirements than in another State.” S. Rep. No. 95–127 at 41, reprinted in 3 1977 Legis. Hist. 1416. It is reasonable to assume that Congress, when it enacted the ozone reclassification regime in 1990, would have expected that upwind states would have in place implemented SIP provisions that would eliminate significant contributions, as required by section 110(a)(2)(D), by the time downwind areas were obligated to attain the ozone standard. If that had happened, downwind areas that failed

to attain by their attainment dates would have failed to attain as a consequence of their own failures to adopt necessary controls, not as a consequence of the failure of other states to adopt and implement controls necessary to eliminate the contribution of their own sources to the downwind area’s nonattainment problem.

Such controls were not in place, however, since, as explained in EPA’s transport policy, it in fact took many years for EPA and the States to gain a sufficient understanding of the interstate ozone transport problem to determine the appropriate division of control responsibilities between the upwind and downwind States under the Clean Air Act. It was only through the work of the Ozone Transport Assessment Group (OTAG), which consisted of members from states, industry and environmental groups, and EPA’s subsequent NO_x SIP call, promulgated in October, 1998, that the division of responsibilities among the states was established. Consequently, the fruits of those efforts—the implementation of the control measures in upwind states that were needed to eliminate the significant contribution of sources in those states—would not ripen until 2003 or 2004, years after the statutory attainment dates for areas such as Springfield, MA. Moreover, because the allocation of responsibility for transport was not made until late 1998, the prohibitions on upwind contributions under section 110(a)(2)(D) and section 126 could not be enforced prior to the attainment dates of areas such as Washington, D.C., Greater Connecticut and Springfield, MA. Nor could Congress intend that the upwind areas with later attainment dates accelerate the timetables provided for their own attainment as an indirect means of controlling transported pollution in the absence of data on transport impacts.

To apply the reclassification provision of section 181(b) without taking into account the timing of the identification and implementation of the emission reductions needed to eliminate the significant contribution of the upwind states to the downwind states would lead to the result that the downwind states’ sources are required to implement potentially costly control measures to offset the effects of upwind state pollution—pollution that EPA has now determined must be prohibited under the CAA and pollution that will soon be eliminated as a result of the NO_x SIP call and by emissions reductions in upwind states with later attainment dates. Imposing on downwind areas the burden of

controlling for pollution attributable to upwind sources would compound the inequities that Congress was seeking to avoid with the enactment of sections 110(a)(2)(D) and 126, thereby frustrating Congressional intent. Moreover, such a result would be at odds with the kind of concerns that led Congress to adopt section 179B for international border areas—concerns that areas not be held accountable for pollution over which they exercise no control.

Section 181(b)(2) provides that EPA should determine whether an area attained the standard “within six months following the applicable attainment date (including any extension thereof).” This reference to extensions in section 181(b)(2) is not limited to extensions granted under section 181(a)(5). Nor does section 181(a)(5) state that Congress intended it to be the only source for an extension.

Moreover, section 181(a)(5) addresses only one specific type of an extension. The fact that Congress provided an extension based on air quality that is near attainment at the time of its deadline does not imply that Congress precluded the Administrator from conferring extensions based on other considerations—such as the case when air quality is affected by downwind transport. The principle underlying section 181(a)(5)—that areas should not be reclassified if they have done enough to control local air pollution but are still not able to attain—also applies in the case of downwind transport. Section 181(a)(5) shows that Congress was not unalterably opposed to extensions of attainment dates without requiring an area to be subjected to reclassification and the increased control burdens that go with reclassifications. Indeed, section 181(a)(5) indicates that Congress wanted to extend attainment dates without adding control obligations when an area had done what was apparently sufficient to bring it into attainment.

The United States Court of Appeals for the District of Columbia Circuit has previously held that EPA may extend SIP submission deadlines even without explicit statutory authorization. In *Natural Resources Defense Council, Inc. v. EPA*, 22 F.3d 1125, 1135–36, the Court upheld EPA’s extension of a statutory deadline for submission of NO_x rules and a NO_x exemption request under section 182(f). Although the Court did not use the theory advanced by EPA, the court did find that the Agency had authority under the CAA to extend the deadline. EPA had found that additional time would be needed for States to conduct photochemical grid modeling in order to document the effects of NO_x reductions on an area.

EPA had found that "the time needed to establish and implement a modeling protocol and to interpret the model results will, in a variety of cases, extend beyond the November 15, 1992 deadline for submission of NO_x rules." EPA thus extended the submission deadline, provided the states could show that modeling was not available or did not consider effects of NO_x reductions and that the states submit progress reports on the modeling. The D.C. Circuit upheld EPA's extension of the deadline and of EPA's time to review the submissions and make an exemption determination. The Court found that "because only a single NO_x RACT submission is required under the statute, it is logical to infer that Congress intended data supporting exemptions to be included in that submittal and that the EPA have the full 14–18 months to review them and to make an exemption determination." Even in the absence of explicit statutory authority, the Court held that "had Congress foreseen the exemption timing problem, a matter outside the EPA's control, it would have elected to accord the EPA the full statutory review time." 22 F.3d at 1136. The court ruled that "under the circumstances here the NO_x RACT deadlines were properly extended to further the Clean Air Act's purposes." *Id.* At 1137.

Here, similarly, EPA's and the states' inability, until the OTAG and NO_x SIP call process was completed, to document the impacts of upwind areas on the attainment status of downwind areas, and to assess and allocate responsibilities among the areas, caused a delay in meeting the attainment deadlines. EPA believes that, had Congress foreseen this timing problem, it would have elected to accord the states and EPA more time to meet the attainment deadlines without imposing reclassification requirements on downwind areas. As in the case of the delayed photochemical grid modeling needed for the NO_x submissions at issue in *NRDC v. EPA*, EPA has shown that the ability to document and analyze ozone transport was delayed. And as with the criteria imposed on areas seeking NO_x submission extensions in *NRDC*, EPA has required analogous showings by the states, limiting the extensions to those areas that document a transport problem and that submit attainment demonstrations and adopt local measures to address the pollution that is within local control.

As for Section 182(i), it has no bearing on the authority of the Administrator with respect to the attainment date extensions at issue here. Section 182(i) applies to the authority of the

Administrator after an area has been reclassified, and relates to the setting of an attainment date for the reclassified area. It does not apply to an area that is not being reclassified, but rather is being granted an extension of its attainment date that effectively defers the applicability of the reclassification provisions. Here, EPA is authorizing an attainment date extension to relieve an area from reclassification requirements, and thus 182(i) does not apply. The section explicitly applies to an area that has already been reclassified, and indicates nothing about the authority of the Administrator to extend an area's attainment date prior to a determination that the area must be reclassified. Nor does section 182(i) indicate Congressional intent to deny EPA authority to interpret the CAA consistently with provisions designed to prevent downwind areas from being forced to compensate for upwind pollution.

Comment 2: The CAA does not authorize EPA to extend the time for implementation of adopted local control measures. EPA's approach allows downwind areas to defer implementation of local measures until the extended attainment deadline, thereby precluding any determination that the local measures have achieved the degree of emission reduction necessary to provide for attainment when the upwind sources are controlled. EPA unlawfully proposes to allow attainment date extensions for downwind areas to implement local control measures. Under sections 182(b)(1), 182(c)(2)(A), and 172(c)(1), downwind areas must provide for attainment of the national ambient air quality standards (NAAQS), and EPA unlawfully seeks to lessen these statutory obligations.

Response 2: As explained in Response 1, above, EPA's attainment date extension policy aims to effectuate, not frustrate the intent of Congress, by providing for an equitable allocation of responsibilities between upwind and downwind areas. Under EPA's interpretation, when an upwind area interferes with a downwind area's ability timely to attain the standard, the downwind area retains the obligation to adopt all applicable local measures, and to implement them as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. Moreover, EPA requires that the area submit an approvable attainment demonstration containing any necessary, adopted local measures and showing that, assuming the appropriate upwind emission reductions, the area

will attain the 1-hour standard no later than the final NO_x SIP call and/or the upwind area's attainment date. Thus both the upwind and downwind areas are held accountable for their respective shares of the emissions reductions required to achieve attainment in the area. EPA views this coordination of the responsibilities of the upwind and downwind areas not as a lessening of the statutory obligations, but as a reconciliation of them with the reality of air transport as we have come to understand it, and with the intent of Congress that areas make expeditious progress towards attainment without sacrificing basic principles of fairness. The attainment date extension policy thus will still lead to attainment as expeditiously as practicable, taking into account the upwind contribution. Indeed, given the impact of upwind areas' contributions and the need for upwind area emissions reductions, requiring local contributions earlier would not accelerate attainment, considering that EPA is requiring downwind areas to implement local controls as expeditiously as practicable. Moreover, the difficulty of assessing relative contributions and responsibilities of upwind and downwind areas until the completion of the OTAG effort and the NO_x SIP call lends support to extending attainment deadlines in these circumstances, even without express statutory permission. See *NRDC v. EPA*, discussed supra, in Response to Comment 1.

Comment 3: Reclassification alone has no immediate or mandated regulatory consequence. A SIP revision can consist of a showing that attainment will result from implementation of emission reductions already required pursuant to the SIP call. EPA's Extension Policy is inconsistent with Clean Air Act sections 179(c) and (d). This provision does not require additional local control measures beyond those previously approved implemented by the State if adequate control measures have been adopted for upwind areas and are in the process of being implemented.

Response 3: Reclassification does impose regulatory consequences. Section 182(i) requires that "each state containing an ozone nonattainment area reclassified under section 181(b)(2) shall meet the requirements of subsections (b) through (d) of this section as may be applicable to the area as reclassified." Thus the area must meet the more stringent requirements of a higher classification, including new source review offsets and changes in cutoffs for permitting. The provisions of section 181(b) apply to reclassification of ozone areas. Sections 179(c) and (d) do not

apply to ozone areas that are classified as marginal, moderate, or serious, which are subject to the requirements of section 181, if EPA determines that they failed to attain the ozone standard as of the applicable attainment date pursuant to that section.

Comment 4: Sections 176 and 184 of the CAA do not support EPA's extension policy. Congress left no room in the statute for attainment date extensions for downwind areas, considering instead the additional recommended Ozone Transport Commission (OTC) control measures for upwind areas to be sufficient. Sections 110(a)(2)(D)(i)(1) and 110(a)(2)(A) do not authorize the EPA policy. Section 110(a)(2)(D) imposes a burden only on upwind states and does not relieve downwind states of their obligation to attain by the pre-set attainment dates. EPA lacks the authority to rewrite the extension authority Congress wrote into sections 181(a)(4) and (b)(3). Congress was well aware of the transport problem and addressed it in explicit provisions, including section 110(a)(2)(D), section 110(a)(2)(A), section 184, section 176A, section 126, section 182(h), and section 181(a)(4). Thus Congress knew how to address pollutant transport and how to draft an attainment date extension addressed to it when it wished to do so. It also provided for voluntary reclassification under section 181(b)(3) to be available for downwind areas are affected by transport. Congress dealt with transport explicitly in sections 181(a)(4), 182(h) and 182(j)(2). Congress knew how to exempt transport-affected areas from control requirements if it wanted to, as it did for rural transport areas under section 182(h). Congress limited relief for areas subject to transport to exemption from sanctions, but did not extend this to section 110(c) FIPs. H.R. 101-490, at 248. This shows Congress' intent to apply all of the CAA enforcement tools except for sanctions under section 179. Congress considered the effects of transport, but not in the reclassification context. Congress did provide for attainment date extensions, but not in this context.

Response 4: Having crafted provisions in the 1990 Amendments that it believed would be adequate to address the problem of downwind nonattainment, Congress did not expressly provide for an attainment date extension based on transport. But the absence of such a provision does not prevent EPA from inferring that Congress would have intended to provide such relief should the express provisions fail to function as envisioned. In fact, the manner in which Congress did address the issue of

transport shows that EPA's interpretation is consistent with Congress's approach in other sections of the CAA. EPA's interpretation resolves the problem that arose when the express statutory tools failed to function as Congress had envisioned. It also, as EPA pointed out in its guidance, 61 FR 14441 (March 25, 1999), provides a means to reconcile the attainment demonstrations and attainment date requirements for downwind areas with the graduated attainment date scheme and schedule for achieving reductions in the upwind areas. Although Congress intended that upwind areas be responsible for preventing interference with downwind areas' attainment dates, it also expressly allotted more time for certain upwind areas to reduce their emissions so as to attain the standard.

Sections 110(a)(2)(D), 126, 184 and 176, provide principles for dealing with transport, most importantly the principle that upwind areas be held accountable for reducing emissions that interfere with the ability of downwind areas to attain the ozone standard. EPA disagrees with commenters that Congress intended section 110(a)(2)(D) and the other transport provisions to exclude the possibility of relief for downwind areas even if no timely and adequate recourse against transport was in fact available to them. These sections express Congressional intent that downwind states not be saddled with responsibility for pollution beyond their control. Their premise was that there would be a means of redress against upwind states prior to the downwind area's attainment date—a means that also would not be at odds with Congress's decision to provide longer attainment periods for upwind areas confronting onerous pollution problems. But, as EPA pointed out in its guidance, there was in fact no practicable way to carry out the Congressional scheme until a much more comprehensive understanding of the complex facts of ozone transport could be achieved.

Although Congress in the 1990 Amendments and in prior versions of the Clean Air Act attempted to deal with the issue of transport, the reality of the problem proved far more complicated and intractable than expected. As explained in EPA's guidance, 64 FR 14441 (March 25, 1999), it took many years for EPA and the states to study, analyze, and attempt to resolve the allocation of responsibility for transported ozone pollution. EPA's initial efforts included a policy memorandum addressing the issue of overwhelming transport in 1994. The Ozone Transport Assessment Group was launched in 1995. Through this

collaborative process, EPA, 37 states and industry and environmental groups tackled the problem of allocating responsibility for transport in its Overwhelming Transport Policy. During the period required for this effort, the resolution of regional transport issues was held in abeyance. It was not until late in 1998 that the conclusion of the OTAG and SIP call processes resulted in assignments of responsibility that could assist in the design of SIPs and the formation and implementation of attainment demonstrations. 63 FR 57356 (Oct 27, 1998) (NO_x SIP Call Rule). In May 1999, these efforts were reinforced when EPA approved petitions submitted under Clean Air Act section 126 by northeast states to mandate federal controls on utilities and other large NO_x emitters in upwind States. 64 FR 28250 (May 27, 1999) (Section 126 Rule). A more detailed description of the history of efforts to address ozone transport through the 1990's may be found in the preambles to these rulemakings. 63 FR 57360-63, 64 FR 28253-54.

Even after the NO_x SIP call rulemaking was complete, it was temporarily placed in doubt when the Court stayed the SIP call rule pending judicial review. The court has ordered NO_x SIP call SIPs to be submitted by October 30, 2000, and to require sources to implement controls by May 31, 2004.

Thus, although Congress in the Clean Air Act had formulated a prohibition on transport interfering with downwind attainment, it remained largely theoretical until EPA and the states could understand how to identify, quantify, and analyze the transport of emissions, and develop regulatory means to coordinate the respective responsibilities of a multitude of upwind and downwind areas. Although Congress endowed EPA and the states with legal tools to protect downwind areas from interference with attainment, it did not give them the ability to use the tools in the time frame anticipated by Congress. By the time EPA and the states gained an understanding of regional transport sufficient to allow enforcement of the provisions of the CAA, it was too late to help some downwind areas meet their attainment dates. Thus it is spurious to argue that EPA and the States could have sought and obtained meaningful relief earlier under section 126 and section 110.

The fact that upwind states are subject to the requirements of section 110(a)(2)(D) but other countries are not provides a possible explanation as to why Congress explicitly provided that ozone nonattainment areas not be reclassified upwards if they would have attained by their attainment dates "but

for emissions emanating from outside" the United States (section 179B(b)) but provided no such express exemption from the reclassification provisions in the case of domestic transport. See IV 1990 Legis. Hist. 5741–42 (remarks of Sen. Gramm introducing the international provision and Sen. Baucus supporting it; Senator Gramm stated: "It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over. So what this amendment does it says that in assessing whether or not the State implementation plan has been met, and when assessing the levels of ozone . . . pollution that is being generated across the border has to be taken into account so that our cities and regions will be judged based on what they do. . . . [The State, region and city] will have the opportunity to come to EPA and say that they are in compliance in terms of their emissions, that their failure to meet the overall standards is due to something that is happening in a sovereign foreign country over which they exercise no control." Senator Baucus stated that, "It is clear that cities like El Paso in the State of Texas do not have control of their own destiny themselves. Much of the air that affects them is from outside, from another country, over which the Senator said the State of Texas and EPA in this country has virtually no control.") Congress assumed that EPA would have control over domestic transport under section 110(a)(2)(D), so it saw no need to enact a domestic counterpart to section 179B. As set forth in EPA's responses and the history of EPA and the states' efforts to understand and control transport, Congress's assumptions were not realized.

As set forth in Response 1 above, Congress intended, through enactment of the provisions addressing transport cited by commenters, to prevent downwind areas from being held accountable for pollution over which they exercise no control. Because of the complexity of the transport problem, EPA and the states could not deploy these statutory provisions in time to achieve attainment by their original attainment dates. But this does not mean that Congress would have intended EPA to construe the very provisions designed to protect downwind areas as precluding EPA from interpreting the statute to provide the relief that those provisions failed to furnish. Notwithstanding the absence of an express provision for an attainment date extension based on transport, EPA believes that, taking into account the CAA read as a whole, Congressional

intent supports EPA's interpretation of an attainment date extension in the circumstances presented here.

Commenters argue that the fact that Congress formulated various provisions addressing certain specific types of issues concerning transported pollution, but did not provide for an explicit attainment date extension based on transport, should be taken as proof that Congress meant to preclude such relief. But each of the provisions cited by commenters—to sections 181(a)(4), 182(h) and 182(j)(2)—was designed to address a different problem from the one EPA addresses here, and none undermines EPA's interpretation that Congress intended to provide relief in the situations currently confronted by downwind areas. As shown in EPA's previous responses, Congress expressed its intent in the transport sections to protect downwind areas from the burdens of transported pollution, but the mechanisms it provided could not be invoked in time.

As for the sections referenced by commenters, Section 181(a)(4) concerns the potential for adjustment of the original classification of an area if its design value is within a certain margin. It allows the Administrator to consider a number of factors, including among them transport. This provision in no way casts doubt on the Congressional intent not to penalize downwind areas through mandatory reclassification should they later fail to attain the standard due to transport. Section 182(h) provides a mechanism for original classifications of rural transport areas as marginal areas, the lowest level of ozone nonattainment areas. Far from indicating that Congress did not intend relief for areas that are victims of transport, this provision reflects Congressional concern with not burdening areas with responsibility for transport not of their making. It sheds no light on whether Congress would have intended EPA to reclassify areas suffering from transported pollution if they were subsequently unable to meet their attainment dates.

Nor, as commenters suggest, would so-called "voluntary" reclassification under section 181(b)(3) furnish an adequate remedy for the situation confronting areas that fail to attain due to interference from transport. An area that felt constrained to seek "voluntary" reclassification would still be forced to subject itself to more stringent requirements to control local pollution in lieu of imposing on upwind areas the responsibility for the transport they caused.

Comment 5: The states had power to timely submit SIPs controlling local

pollution to the full extent that it was in the state's power to require, and combine it with a request to EPA to invoke EPA's authority to control upwind pollution, and in this way the state could have attained by the applicable deadline. EPA's 1994 overwhelming transport policy required transport modeling to be documented the same time as the attainment demonstration due in 1994. There is no justification for allowing states to request attainment date extensions based on transport of which they were aware many years ago. An opening is created for upwind states to argue that the NO_x SIP call effectively accelerates their attainment dates. The OTC was to recommend measures to bring about attainment by the deadlines "in this subpart."

Response 5: As pointed out in EPA's Response 4, above, an awareness that transport was occurring is not equivalent to an ability to identify, analyze, and control the emissions that cause it. This ability, which grew out of years of study and joint effort, did not coalesce until late in 1998. Thus, downwind states were faced with the prospect of having to shoulder responsibility for pollution not of their making—a responsibility that Congress did not intend to impose on them, even as they were aware of an ongoing effort, involving EPA and thirty-seven states, to allocate responsibilities for transport through the OTAG process. As EPA stated in its guidance on the attainment date extension, the state of knowledge about and the ability to document and model transport has advanced considerably since the issuance of EPA's overwhelming transport guidance. The commenters seek to ignore the climate of uncertainty in which states and EPA were operating with respect to controlling transported pollution. Section 110(a)(2)(D) and 126 are not self-executing, and until the culmination of the OTAG process, downwind areas in the OTAG region could not determine what boundary conditions they should assume in preparing attainment demonstrations and determining the sufficiency of local controls to bring about attainment. Meaningful relief under these provisions simply was not available earlier.

But even with the allocation of responsibilities now available, EPA believes that Congress did not intend to accelerate the obligations of upwind states so that downwind states can meet earlier attainment dates. This would undermine the objective, firmly embodied in the graduated attainment framework of the Clean Air Act, to allow

upwind areas with more severe pollution longer attainment deadlines. Upwind areas with later attainment dates still find it difficult to reduce emissions solely to control for transport without accelerating the time frames intended by Congress. It is unrealistic to expect upwind areas to be able to segregate out the reduction of emissions for purposes of transport from the reduction of emissions for purposes of achieving attainment in the upwind area.

The fact, as a commenter points out, that Congress envisioned that the OTC-recommended measures would bring about attainment by the dates "in this subpart" reflects Congress' over optimistic view that transport would be understood and controlled in time to allow upwind areas to be held accountable for their contributions to downwind nonattainment. The comment underscores that Congress expected upwind reductions to take place by the time the downwind area was supposed to attain—this confirms that Congress expected that upwind pollution would be controlled prior to downwind attainment deadlines, and that only local pollution would remain as the downwind area's responsibility. But, as we previously stated, the time line for analyzing and assessing transport, and the resulting ability to implement appropriate measures to control upwind pollution, did not keep pace with Congress's expectations. EPA is extending attainment deadlines in order to allow upwind areas to assume responsibility for the pollution they generate and that is transported across State boundaries, and to fulfill the Congressional intent that downwind areas not be saddled with this burden.

Comment 6: EPA's decision directly conflicts with *NRDC v. EPA*, 22 F.3d 1125 (D.C. Cir. 1994), where the Court held that EPA could not extend a clear statutory submission deadline.

Response 6: To the contrary, EPA believes that *NRDC v. EPA* supports EPA's authority to issue the attainment date extensions at issue here. In that case the U.S. Court of Appeals for the D.C. Circuit upheld EPA's extension of SIP submittal deadlines even though such extensions were not expressly permitted by the Clean Air Act. See the discussion in Response to Comment 1, above. The Court relied in part on the need for additional time to undertake photochemical modeling to document the impact of NO_x reductions on individual areas, an effort that took more time than Congress anticipated. Here, the effort to document, model, and analyze regional ozone transport issues and assess responsibility for relative

contributions is, if anything, more complex than the NO_x exemption showings for which the Court upheld deadline extensions in *NRDC v. EPA*. The Court's reasoning in *NRDC v. EPA* should be fully applicable to the policy at stake here.

Comment 7: A commenter concedes that "EPA's delay in establishing the mandatory emission reduction targets for upwind States might justify the delay in adoption of adequate section 110(a)(2)(D) measures by the upwind states," but concludes that the delay "cannot justify delaying the obligation of downwind States to implement all the local measures necessary for attainment by the statutory deadline." One commenter, while acknowledging that it "does not take issue with EPA's objective of accommodating the delayed control contributions from upwind areas," contests EPA's claim of authority to extend attainment dates. This commenter suggests that the appropriate remedy is for EPA to authorize states to take credit for mandated emission reductions when preparing attainment demonstrations and determining the degree of local controls needed to attain.

Response 7: While the commenter recognizes that there was a delay in understanding and regulating transported pollution that "might justify the delay" in upwind states adopting section 110(a)(2)(D) measures, and agrees with EPA's objective in taking this delay into account, the commenter's proposed solution fails to address the problem it acknowledges. The commenter suggests allowing areas to take credit when they prepare their attainment demonstrations—but this solution addresses only the planning requirement, and does not assist the areas in solving the problem of failing to meet their attainment deadline. It is to address this issue, and to effectuate Congressional intent to avoid penalizing downwind areas in these circumstances, that EPA has formulated the attainment date extension. The delay in ascertaining the amount and achieving the reality of upwind reductions—a delay conceded by commenters—resulted in uncertainty in a downwind area's ability not only to plan for attainment, but to realize it.

This comment also highlights the difficulties that EPA's attainment date extension policy was designed to address: namely that the states and EPA were (1) not able to assess relative contributions until it was too late to implement the controls to bring about attainment; and (2) upwind areas with longer attainment dates should not be required to accelerate their reductions in time to help bring about attainment

as scheduled in affected downwind areas with earlier attainment dates. As the policy explains, the determination of relative upwind and downwind contributions and the allocation of responsibility for determining controls did not occur in time for a number of areas to meet their attainment deadlines.

Comment 8: EPA's approach allows emission reductions from motor vehicles to be deferred beyond the deadlines currently required by the CAA. The policy allows deferral of conformity budgets beyond the statutory attainment year. It is also inconsistent with statutory requirements for reasonable further progress in section 182(c)(2)(B), for implementation of all reasonably available control measures as expeditiously as practicable in section 172(c)(1), and for requiring that Transportation Plans and Transportation Improvement Programs (TIPs) "will not delay timely attainment of any standard or . . . other milestones in any area in section 176(c)(1)." *Response 8:* EPA disagrees with the

commenter that the policy allows deferral of motor vehicle emission reductions and reasonably available control measures beyond dates contemplated in the CAA. The statute requires SIPs to provide for attainment as expeditiously as practicable and for reasonable further progress as necessary to provide for attainment. The motor vehicle and RACM measures the commenter is apparently referring to are not specific measures that the statute requires to be implemented by a fixed date. Rather, they are whatever motor vehicle and RACM measures are necessary to provide for attainment and RFP by the applicable attainment date. Thus, whatever attainment date is applicable, either by virtue of the statute or an attainment date extension, defines the outside date by which motor vehicle and RACM measures necessary to provide for timely attainment must be implemented. A determination must then be made whether any additional measures could advance that date, but the analysis is keyed to the established attainment date. The commenter also complains about delays in establishing budgets for conformity purposes, and requirements that transportation activities not delay timely attainment. Again, these issues are not relevant to establishing an appropriate attainment date. Motor vehicle emission budgets for conformity purposes are those budgets that are established for the attainment year. The CAA does not require that these budgets be set for any specific year, but rather contemplates that they will be established for the attainment year. Where EPA has properly

determined that an attainment date extension should be granted, conformity budgets are required for the extended attainment year; they are no longer required for the superseded attainment year. The requirement that transportation activities not delay timely attainment is a duty imposed on transportation planning agencies to insure that their activities will not interfere with attainment of the standard by the applicable attainment date. This duty is irrelevant to establishing the appropriate attainment date in the first instance. Once an applicable attainment date is established, transportation planners must insure that their activities will not delay attainment by that date.

Comment 9: A commenter argues that under the terms of section 188(e), an extension of the PM attainment date may not be granted unless the State demonstrates that the area's SIP contains "the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any State, and can feasibly be implemented in the area." Moreover, section 188(e) provides for consideration of transboundary emissions from "foreign countries," not from U.S. sources. EPA's proposed ozone nonattainment extension policy includes neither of these limitations.

Response 9: The provision cited by commenters applies the PM-10 standard, and is not applicable to attainment dates for ozone. Moreover, the regulatory regimes applicable to ozone and PM-10 are quite different, as are the types of transport issues that arise with respect to these two different pollutants. The issues EPA and the states confront with respect to long-range regional transport of ozone do not apply to PM-10. Beyond that, section 188(e) embodies a standard of "impracticability" as a basis for seeking an extension for a PM-10 attainment deadline. With respect to the ozone attainment deadlines at issue here, EPA is not granting extensions solely on the grounds of impracticability of attaining the standard, but rather, that Congress intended both upwind and downwind areas to have an opportunity to bear the responsibility for their respective contributions to an area's attainment problems.

Comment 10: EPA's effort to "manufacture a conflict" between the statutory deadlines and transport provisions fails, since these provisions must be read together so that the upwind area's "obligation to control pollution affecting the downwind area—be it interstate or intrastate—falls due no later than the downwind area's attainment date." EPA's argument that

areas with longer attainment dates be given additional time ignores the statutory requirement that areas attain as expeditiously as practicable, even if that results in attainment before section 181(a)(1)'s outer deadlines. The section 181 attainment deadlines are "outside limits." A commenter argues that Section 181(a) does not prevent upwind areas from abating pollution in downwind areas in time to meet the downwind area's attainment date. EPA's policy cannot be defended as necessary to reconcile 181(a) with the CAA's anti-transport provisions. Upwind areas should be able to control pollution contributing to downwind area's nonattainment even before reaching their own later-prescribed attainment dates.

A commenter disputes EPA's interpretation of the language in section 110(a)(2)(D)(1) that SIP provisions prohibiting emissions which cause transport be "consistent with the provisions of this subchapter." EPA should interpret the provisions to respect the attainment schedules of sections 181 and 182, and address transport separately. No reference is made to any legislative history that would legitimize EPA's reading. An upwind area's obligation to control transported pollution does not depend on its own timetable for attainment. EPA's policy excuses upwind area's responsibility from their obligations under sections 110, 176A and 184, exempting them via granting extensions to downwind areas. The policy defers downwind action until the upwind area attains.

EPA improperly assumes that it would not be practicable for upwind sources to reduce emissions contributing to downwind nonattainment prior to the time such reductions would be required to attain in the upwind area. The presumption should be precisely the opposite: unless the upwind state can show that such reductions are impracticable, EPA should assume such reductions can be made at times to eliminate the upwind state's contribution to nonattainment downwind by the downwind area's attainment date. EPA's rule eliminates the CAA's requirement that attainment be accomplished as expeditiously as possible. Section 184 indicates Congressional intent that upwind areas make reductions if necessary to permit downwind areas to attain by their statutory deadlines.

Response 10: EPA disagrees with the commenter's contention that it has "manufactured a conflict." Rather, EPA believes that it recognizes and resolves the real tension between the statutory

deadlines and the transport provisions. EPA explained this tension in its guidance on the attainment date extension policy. See also EPA's response to Comment 4. Congress did not intend that areas with more severe pollution problems, and accordingly longer attainment dates, be forced to accelerate reductions on a timetable that otherwise would not be deemed to be required in order to meet their obligation to attain "as expeditiously as practicable." Commenters want EPA to read the requirement for upwind areas, not as containing the limitation that their attainment deadline be "as expeditiously as practicable"—but instead, to require deadlines that are not practicable solely for the purpose of obtaining downwind reductions.

In dealing with ozone, a regional pollutant, an upwind nonattainment area cannot make reductions for transport purposes without affecting its schedule for making reductions for attainment purposes. Compelling the upwind area to make drastically faster reductions is akin to asking it to go on a crash diet. But the interplay of the statutory provisions on attainment deadlines and transport reduction indicates that Congress intended upwind areas to reduce transport, but not to the extent of requiring shorter schedules for upwind attainment. Separating out reductions for purposes of attainment and those for the purposes of transport is more difficult than commenters depict, and EPA believes that Congress did not intend a regimen of drastic reductions without regard to the upwind area's attainment schedule. In reality, an upwind area that remains in nonattainment may doubtless be shown to continue to transport pollution to an affected downwind area.

Congress provided statutory tools to address the issue of transport (including sections 184, 126, and 110 (a)(2)(d)), and believed that they would be used to reach an accommodation among upwind and downwind areas—but as EPA and some commenters have recognized, this accommodation took longer than anticipated. Congress did not, however, intend that upwind areas be forced to apply draconian measures in order to allow the downwind areas to meet their shorter attainment periods.

And although the attainment deadlines can be looked at as "outside limits," they in fact represent the dates at which statutory consequences must be considered. As long as no earlier date is deemed to be "as expeditiously as practicable," there is no evidence that Congress considered an earlier date to be acceptable for these areas, regardless of "practicability." Even if earlier

deadlines would be beneficial to downwind areas, Congress did not indicate that this criterion should override the criterion of "practicability" for the upwind area.

In administering the Clean Air Act and the NO_x SIP call, EPA has interpreted section 110(a)(2)(d)'s significant contribution test as requiring reductions as expeditiously as practicable without requiring upwind areas to impose draconian measures. The United States Court of Appeals for the District of Columbia Circuit recently upheld EPA's use of a cost component in applying that section's significant contribution test. *Michigan v. EPA*, 213 F.3d 663, 674–679 (D.C. Cir. 2000). EPA decided that the states that were "significant contributors" under section 110(a)(2)(D) need only reduce their emissions by the amount achievable with "highly cost-effective controls." 63 FR at 57403. "Thus, once a state had been nominally marked a 'significant contributor,' it could satisfy the statute, i.e., reduce its contribution to a point where it would not be 'significant' within the meaning of section 110(a)(2)(D)(i)(I) by cutting back the amount that could be eliminated with 'highly cost-effective controls.'" 213 F.3d at 675.

In applying section 110(a)(2)(D), the D.C. Circuit concluded that EPA can consider not only air quality impacts, but also costs of control. Thus EPA has been upheld in interpreting the CAA in a way that limits the upwind area's responsibility to control pollution so as to mitigate its responsibility under section 110(a)(2)(D). The upwind area should not have to impose draconian controls. As the court in *Michigan v. EPA*, concluded, "there is nothing in the text, structure, or history of section 110(a)(2)(D) that bars EPA from considering cost in its application." 213 F.3d 679. The Court's discussion makes clear that EPA, in interpreting the responsibilities of upwind states under section 110(a)(2)(D), may consider differences in cutback costs in determining what constitutes a significant contribution, and that EPA's inquiry is based on balancing a number of considerations to balance health effects and cost-effectiveness.

EPA's policy does not excuse the upwind areas from fulfilling their obligations under section 110. Upwind areas will be held to section 110 and RACM requirements. EPA has determined the upwind areas' section 110 obligations through the SIP call. The SIP call requires reductions by the date EPA determined was as soon as practicable to eliminate significant

contributions to downwind areas.¹ This is coupled with the upwind area's obligation to attain as expeditiously as practicable. It is appropriate to hold downwind areas to the upwind area's attainment date as an outside limit until EPA acts on the upwind area's attainment demonstration. The modeling evidence we have now shows that upwind areas need to come into attainment for the downwind areas of Metropolitan Washington, D.C. and Greater Connecticut to attain the standard.

Comment 11: The section 182(j)(2) "but for" standard applies to intrastate transport. An area must demonstrate that it would have accomplished attainment but for the failure of other areas to implement sufficient controls. The policy is vague, and fails to establish clear standards for a showing of transport. The "affected by transport" standard is unclear.

Response 11: EPA is not constrained by the section 182(j)(2) standard. This section is limited in application to single nonattainment areas that are located in more than one state, and does not address transport coming into an area from another, separate area. Our determinations in the SIP call were clear, and the modeling that resulted from the SIP call effort showed that there were significant impacts from upwind areas on the downwind areas, no matter whether one used as a standard the "but for," "significant contribution" or "affected by transport" formulation. Congress intended that an upwind area that significantly contributes to a downwind area's nonattainment problem should bear responsibility for that pollution. The modeling shows that significant contributions are made by the upwind areas to the downwind areas seeking attainment date extensions. EPA still believes that Congress would not have intended to impose the burden on downwind areas for an upwind area's contribution.

Comment 12: Transport is already incorporated into each area's section 181 design value and thus is assumed in setting the projected attainment date. Congress understood transport resulted in elevated design values, but did not authorize classifications to take into account transport, and provided for reclassification by operation of law based on air quality. In section 181(a)(1), Congress directed that ozone nonattainment areas be placed within

certain classifications based solely on their design values, regardless of transport. Congress understood that many areas were classified as moderate or severe at least in part because of ozone transport, but did not grant EPA discretion to take such transport into account when establishing initial classifications under the CAA. Why does EPA believe so strongly that its approach is consistent with Congressional intent, given Congress's refusal to consider transport in establishing the initial classifications and in light of sections 181(b)(2) and 182(i)?

Response 12: The fact that the provisions governing the initial classification process expressly take transport into account in a specific way—see section 181(a)(4)—does not mean that EPA is precluded from taking transport into account when providing for an attainment date extension based on transport, prior to invoking the reclassification provisions. See EPA's Response to Comment 1. By providing for an extension of the attainment date, EPA is effectuating Congressional intent that the transport relief provisions have a chance to take effect before EPA has an obligation to determine whether the area has attained for purposes of triggering the reclassification provisions.

Comment 13: EPA has previously concluded that reclassification is not a means of penalizing an area, but a means of providing additional reductions that will benefit public health. EPA rejected the notion that bump-up is a penalty when it reclassified the Phoenix, Arizona area from moderate to serious. There, EPA said:

The classification structure of the Act is a clear statement of Congress's belief that the later attainment deadlines afforded higher-classified and reclassified areas require compensating increases in the stringency of controls. The reclassification provisions of the Clean Air Act are a reasonable mechanism to assure continued progress toward attainment of the health-based ambient air quality standards when areas miss their attainment deadlines and are not punitive.

Final Rule, 62 Fed. Reg. 60001, 60003 (Nov. 6, 1997). Why has EPA changed its mind about the functions of reclassification?

Response 13: EPA has not changed its mind about the function of the reclassification provision where the issue of transport is not presented. In the context of Phoenix, a reclassification not involving transport, EPA made the response cited by commenter, and noted that the reclassification provision was

¹ Because the D.C. Circuit stayed the obligation of States to submit plans for 13 months, the court also extended by 13 months the date by which sources must implement the necessary controls.

not intended to be punitive. This view is consistent with the position that EPA takes here, where the circumstances are quite different from the non-transport reclassification context. In the absence of transport, an area that fails to attain by its attainment date, may still fairly be held accountable for controlling local pollution, and be granted a longer attainment deadline in return for more stringent controls. Under these circumstances, applying the reclassification provisions is not punitive. But in the circumstances EPA and the states confront here, the local area is not responsible for pollution that interferes with its ability to meet the standard. In such a case, to trigger reclassification would impose on the area the responsibility and costs for pollution beyond its control, and would indeed be punitive. To avoid such a result, and to effectuate Congressional intent, EPA has interpreted the CAA to authorize an attainment date extension.

Comment 14: Congress directly considered and rejected EPA's interpretation of its attainment date extension authority during the Clean Air Act Amendments of 1990. During debate, Senator Kasten expressed concern about the proposed legislation's provisions concerning the "issue of downwind ozone nonattainment." He noted that pollution from Chicago affected southeastern Wisconsin, but described "the difficulty this poses is that the Nation's most polluted urban areas are given a much more generous timetable for meeting air-quality standards. Chicago will have 5 more years to meet air-quality standards than these Wisconsin counties will have." Senator Kasten then noted that because of Chicago's longer attainment date, it was likely that the Wisconsin counties "will be found in violation of the Clean Air Act because of actions taking place outside of their jurisdiction in an upwind State." The commenter claims that Senator Kasten introduced an amendment which provided, among other things, for an attainment date extension for the downwind area until the upwind nonattainment area achieved emission reductions. S. Comm. On Env't. And Pub. Works, A Legislative History of the Clean Air Act Amendments of 1990, pp. 4954-55 (1993). The commenter claims that "the amendment, was, of course, rejected." Thus the commenter argues that Congress, although it addressed ozone transport in sections 176A and 184, declined to alter the requirements of section 181, even though it was aware of the problem that EPA seeks to solve

with its attainment date extension policy.

Response 14: There is no evidence that the amendment discussed by Senator Kasten was ever debated, considered, or voted upon. Commenter cites no support for the proposition that it was considered and rejected. Thus no inferences can be drawn from the fact that the amendment was not embodied in the statute. Moreover, even if the amendment had been considered and rejected, it differed from and went so far beyond the attainment date extension EPA is applying here as to not be probative of Congressional intent with respect to EPA's current interpretation of the CAA. Among other things, it would have provided for a new and separate Ozone Transport Region, and would have provided for different obligations and consequences for downwind areas than what is contained in EPA's current interpretation of the attainment date extension policy. Legislative History at 4954-56.

Comment 15: The EPA policy is an illegal expansion of the 1994 overwhelming transport policy. Now the upwind area need not be a nonattainment area with a later attainment date, as long as it is an upwind area in another state that significantly contributes to nonattainment in the downwind area. Also, the new policy would allow attainment even later than attainment for the upwind area if the date for the NO_x SIP call reductions is later. Where the upwind area is in attainment or where its attainment date is earlier than the NO_x SIP call reductions, then an extension cannot be justified as necessary to reconcile the transport provisions with section 181(a). There is no justification for applying the policy where the upwind area is in attainment, or is in nonattainment but has air quality meeting the NAAQS, or where it is in nonattainment but has an attainment date earlier than the extension proposed.

Response 15: The policy is not an illegal expansion of the overwhelming transport policy, but an appropriate interpretation of the provisions of the Clean Air Act in order to fulfill Congressional intent. EPA's current articulation of the attainment date extension policy reflects the considerable advances in understanding and allocating responsibility for transport that have occurred since the formulation of the Overwhelming Transport Policy. These advances have resulted from the work on ozone transport included in, among other efforts, the OTAG, SIP call, and area modeling programs. EPA thus regards

the attainment date extension policy as superseding the Overwhelming Transport Policy. See EPA's earlier responses. The policy is not being applied here so as solely to involve upwind attainment areas, or upwind areas with earlier attainment dates. Upwind attainment areas with deficient SIPs have still been found to contribute significantly to downwind nonattainment. The SIP call involves a statewide area that may include attainment and nonattainment areas that have been found to contribute significantly to downwind nonattainment.

Comment 16: Downwind areas should be required to implement, not just adopt, all required measures before becoming eligible for an extension. Modeling is imprecise and an area might be able to attain if they implement all required measures, which should already have been implemented prior to the original attainment date. A state could have timely submitted all the provisions for control of local pollution as required by sections 182(b)(1)(A)(i), 182(c)(2), and 172(c)(1) providing for the full extent of local reductions that it was in the state's power to require.

Response 16: In granting an attainment date extension for an area, EPA has determined that upwind reductions are necessary to help the area reach attainment. Thus, requiring all local reductions to be implemented prior to the time that upwind reductions are achieved would not accelerate attainment. Nonetheless, EPA has required that local reductions be implemented as expeditiously as practicable. See EPA's Guidance 61 FR 14441 (March 25, 1999).

Comment 17: EPA's allegation that local measures "will become superfluous once upwind areas reduce their contribution to the pollution problem," 64 FR 14444, is mistaken. First, the measures will produce public health benefits during the period prior to implementation of upwind reductions, and second the CAA independently requires all areas to "implement all reasonably available control measures as expeditiously as practicable," 172(c)(1), regardless of what reductions are expected from upwind areas. EPA should not allow downwind areas to postpone implementing local measures until upwind reductions are achieved. This extension is unlawful, and, because unexplained, arbitrary and capricious.

Response 17: EPA disagrees with the commenter's characterization of EPA's actions. EPA is in fact requiring downwind areas to implement the local

control measures required under the classification as expeditiously as practicable, but no later than the time the upwind reductions are achieved. See EPA's Guidance, *supra*. To obtain an extension the area must have provided that it will implement all adopted measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment will be achieved. See also response to Comment 16, above. No measures are being postponed as a result of the areas being granted a later attainment deadlines. None of these areas have delayed or postponed the effectiveness of measures because their attainment date is being extended. The states are enforcing their attainment measures as expeditiously as practicable. Thus EPA's interpretation is not unexplained, arbitrary, nor capricious. As EPA has explained, it seeks to reconcile and coordinate the responsibilities of upwind and downwind areas to work together to achieve attainment. However, as discussed elsewhere, EPA has applied the section 172(c)(1) RACM requirement to these areas.

Comment 18: EPA is excusing downwind areas from the requirement that nonattainment SIPs must provide for attainment of the NAAQS as provided in sections 182(b)(1)(A)(i), 182(c)(2)(A), 172(c)(1), and is also excusing them from the requirement that they implement all reasonably available control measures as expeditiously as practicable, regardless of the reductions required for attainment. EPA's attempt to lessen these obligations is unlawful and, because unexplained, arbitrary and capricious.

Response 18: EPA is not excusing downwind areas from the requirement that they submit SIPs providing for attainment. Nor is EPA excusing downwind areas from the RACM requirement. EPA's interpretation does not exclude what is necessary for attainment; rather, a measure is RACM if it is needed for attainment. EPA is enforcing this requirement, but allowing the downwind state to take into account the control contribution of upwind areas that Congress envisioned, and that the commenters themselves acknowledge is embodied in Clean Air Act provisions, in determining the applicable attainment date. EPA is also requiring that the states implement reasonable control measures as expeditiously as practicable. See EPA's Responses to other comments.

Comment 19: EPA's policy cannot be defended as a reconciliation of section 181(a) with the CAA's anti-transport

provisions. Under a proper interpretation of the CAA, (1) upwind states' SIPs would ensure that the upwind areas' pollution contributing to NAAQS violations in downwind areas would be controlled, no later than the downwind areas' attainment date, (2) upwind areas would attain locally as expeditiously as practicable but no later than the date prescribed by section 181(a)(1) for the upwind area, and (3) downwind areas would attain locally "as expeditiously as practicable but not later than" the applicable date prescribed in section 181(a)(1). This reading gives effect to all of the relevant statutory provisions.

Response 19: The commenter concedes that under a proper interpretation of the CAA, upwind states' SIPs would ensure that upwind areas' pollution contributing to violations in downwind areas would be controlled, prior to the downwind area's attainment date. But in the circumstances actually confronting EPA and the states, as EPA has explained in prior responses, it was not possible, given the state of knowledge of regional ozone transport, to control upwind transport prior to the original downwind attainment dates set forth in section 181(a)(1). Thus, in order to allow the upwind areas to fulfill their responsibility under the CAA and to avoid imposing on the downwind area a burden Congress did not intend, EPA proposed interpreting the CAA to adjust the downwind attainment deadlines, the very interpretation that the commenter rejects as unnecessary. By adjusting the attainment date to allow the upwind and downwind areas to carry out the statutory allocation of responsibility that is acknowledged by the commenter, EPA indeed is reconciling the CAA and rendering a proper interpretation.

Comment 20: No extension should be granted unless the area is as small as possible. The basis for transport should not be OTAG modeling, since better data is available.

Response 20: The boundaries for serious nonattainment areas were established by operation of law (CAA section 107(d)(4)). The modeling done by OTAG and by EPA in the SIP call and the local modeling done in connection with the attainment demonstrations represents the best available modeling.

2. Comments Received on 12/16/99 Proposals

Comment 1: The SIP submittals for Springfield, Greater Connecticut and Metropolitan D.C. do not contain substantive additional measures to reduce the state's ground level ozone

problem. EPA cannot approve the attainment submittal because, among other reasons, it does not provide for attainment "as expeditiously as practicable," as required by Section 181(a) of the CAA. Both the attainment submittal and the proposed rule simply assert that the states, acting alone, cannot achieve attainment, either in 1999 or 2007. Neither the state nor EPA explores the question of what the state can do, with the help of specified upwind emission reductions, to achieve attainment as expeditiously as practicable. There is no showing that the State could not achieve attainment in 2003 through a combination of local and state measures and the NO_x SIP Call; we only know that the NO_x SIP call is not likely to produce attainment by 2003 without additional local reductions. The SIPs do not meet the requirements of the CAA to provide for attainment as expeditiously as practicable and/or no later than November 15, 1999. States have made no attempt to provide for attainment as soon as possible. Because they do not meet the CAA's requirements for timely attainment, EPA must disapprove them.

Response 1: Congress did not intend for the states to be responsible for achieving attainment, acting alone, when upwind areas are transporting pollution that contributes to their nonattainment problem. EPA has determined that, under the attainment date extension, the states will attain the standard as expeditiously as practicable. The basis for this determination, and EPA's findings that the area is affected by transport from upwind areas, is discussed extensively in section VII.A.1. EPA has determined that even with the attainment date extension, no reasonably available control measures would advance the attainment date. See other Responses to Comments in section VII.A. and section VII.E.

Comment 2: The state's SIP does not contain adequate contingency measures as required by Section 172(c)(9) of the CAA. Such measures are especially important in a case such as this, where a substantial portion of the emission reductions relied on are assumed to occur well into the future, and well beyond the statutory attainment date.

Response 2: Although no measures have been specifically designated as contingency measures, EPA has found that measures that could reasonably constitute appropriate contingency measures are already contained in the SIP or exist in promulgated Federal regulations. See discussion of contingency measures in Section VII.L for each of the attainment date

extension areas contained in Responses to Comments.

Comment 3: Even assuming the Transport Guidance is consistent with the CAA, the states' attainment submittals do not meet the requirements and/or preconditions necessary to secure adequate emissions reductions from in-state sources. For example, CT and MA could secure further NO_x reductions from power plants and other stationary sources through implementation of RACT on additional stationary sources. The States could secure additional reductions through a diesel inspection and maintenance program.

Response 3: EPA believes that a diesel I/M program may have some potential for emission reductions. At this time, however, there is insufficient information available about the program to determine whether diesel I/M would be economically or technologically feasible. Also, the test protocols are not sufficiently developed to enable EPA to determine the magnitude of reductions possible, and thus whether the program's emission reductions would advance the attainment date. In its other Responses to Comments, EPA has explained and supported its conclusions that the states have adopted and will implement as expeditiously as practicable the measures necessary to secure adequate emissions reductions from in-state sources. No additional RACM is required for these areas.

Comment 4: The States have failed to timely pursue administrative avenues for states to seek redress for transport problems: through a section 126 petition and a section 110 SIP call. CT and MA did not file section 126 petitions until the summer of 1997. Even if EPA's transport Guidance were lawful, it should not be applied except as a matter of last resort—the downwind area must have identified and committed to all necessary local measures and exhausted its administrative remedies in a timely fashion to secure all necessary upwind reductions. The States have failed to do that and have waited too long. They want to wait until upwind reductions bring them into attainment without making any additional emission reductions of their own. This is not in keeping with the attainment provisions and schedules in the CAA.

Response 4: EPA disagrees with the commenter that the States have waited too long to seek relief. As set forth in detail in Section VII.A.1, the States and EPA have worked for years to solve the transport problem, and were unable to obtain adequate redress for transported pollution until the culmination of the OTAG effort. EPA finds that the States

were not dilatory in their efforts to pursue relief from transported pollution; relief was not available until regional transport could be analyzed and responsibility for remediation appropriately apportioned. This effort took years, and was more prolonged than Congress, EPA, or the states had anticipated. See EPA's discussion of the history of the efforts to address transport in Section VII.A.1. The States have not failed to pursue any remedies as they became meaningful and available. Nor does EPA agree that its attainment date extension allows the States to wait for upwind reductions without making local emission reductions. EPA's policy is predicated upon an equitable allocation of responsibility between upwind and downwind areas, and explicitly requires the downwind areas to adopt and implement local controls as expeditiously as practicable.

Comment 5: The states have failed to implement all available control measures and have not demonstrated that attainment is impracticable due to pollutant transport. The states have failed to meet the requirement of EPA's transport policy that the states adopt all local measures required under the area's current classification.

Response 5: EPA disagrees with the commenter's contention that the states being granted attainment date extensions have not satisfied the criterion of adopting required local measures. EPA finds that the states have fulfilled their responsibility with respect to having adopted required local measures. With respect to contingency measures, EPA has determined that measures that can be reasonably construed to function as contingency measures are already contained in the areas' SIPs. See further discussion of the contingency measure requirement in other Responses to Comments. With respect to Massachusetts, the area has adopted and EPA has found approvable all other local measures that are required under its current classification, including NO_x RACT. EPA has further found that the states have or will implement required local measures as expeditiously as practicable. Thus, EPA believes that the states have fulfilled their responsibility to satisfy the requirements of their current classification, and that, under these circumstances, Congress would not have intended them to be reclassified for failure to attain.

Comment 6: The states have not shown that they have committed to implement all local measures necessary to secure adequate emissions reductions from in-state sources. They have not shown that a combination of local

reductions and upwind reductions will achieve attainment by their extended dates.

Response 6: EPA has found that the states have demonstrated attainment through a combination of upwind and local measures. See other EPA responses and discussion of the attainment demonstration. Secondly, although the states theoretically could always secure more reductions through additional local measures, Congress did not intend that the downwind states compensate for the upwind states failure to control transported pollution. Having met the RACM requirements and controlled for local pollutants, the downwind area should not be required to secure additional emissions reductions in order to offset emissions from upwind sources. As EPA has discussed elsewhere in its responses, the States have committed to implement all measures necessary to secure adequate emissions from in-state sources.

Comment 7: The D.C. Circuit stated in *American Trucking Ass'n v. EPA*, 175 F.3d 1027 (D.C. Cir. 1999) that EPA "is precluded from enforcing a revised primary ozone NAAQS other than in accordance with the classifications, attainment dates, and control measures set out in Subpart 2." This means that EPA cannot ignore the attainment dates in Subpart 2.

Response 7: The opinion cited concerns EPA's authority to implement a revised 0.08 ppm 8-hour standard not the standard at issue here—the one-hour 0.12 ppm NAAQS. Regarding EPA's belief that the provisions in Subpart 2 of the CAA govern implementation of the one-hour standard, EPA is not ignoring the attainment dates in Subpart 2. EPA is interpreting the provisions of Subpart 2 to allow EPA to extend the attainment deadlines in accordance with Congressional intent and using means set forth in the provisions of Subpart 2. Thus EPA is properly implementing the one-hour standard.

Comment 8: Each serious area plan on its face shows that the control measures described therein will not by themselves produce attainment at any point, and clearly not by 1999. EPA cannot grant credit for SIP call reductions when the SIP call has been judicially stayed.

Response 8: As EPA has explained elsewhere in its responses, Congress did not intend for a downwind area that is affected by transport to be responsible for pollution generated outside its borders. The stay of the SIP call has been vacated and the SIP call has been upheld. The court lifted its stay and states are required to submit SIPs fully addressing the SIP call and if they fail, EPA must promulgate a Federal plan.

EPA is fully justified in its reliance on SIP call reductions and in granting credit for them in the areas' attainment demonstrations.

Comment 9: The SIPs fail to provide for attainment as expeditiously as practicable even though this is a serious area where a specific attainment deadline has passed. Furthermore, the States have not even evaluated the possibility of attaining sooner than their extended attainment dates. The SIPs must be disapproved by EPA since they do not meet the CAA's basic requirements for timely attainment nor do they consider the possibility of providing for earlier attainment even if the attainment date extension were permissible.

Response 9: Massachusetts has shown that they qualify for an attainment date extension due to transport, and that its SIP provides for attainment as expeditiously as practicable. EPA evaluated the reductions required for attainment from both the upwind and downwind areas, and determined that the Springfield area attainment date is as expeditious as practicable. As explained in the December 16, 1999 proposed approval of the Springfield area attainment demonstration, Massachusetts submitted modeling evidence showing that transported air pollution is causing the Springfield area to be nonattainment and that the transport is from upwind areas outside of New England. 63 Fed. Reg. at 70328. The modeling further showed that lowering transported ozone is extremely important in bringing the Springfield area into attainment of the ozone standard. The modeling showed that it will attain the one-hour standard no later than the date that the reductions are expected from upwind areas under the final NO_x SIP call. Upwind reductions will be provided under the section 126 rule, and under SIPs submitted to comply with the NO_x SIP call rule by a number of states,² by 2003. Thus, an attainment date of December 31, 2003 for the Springfield area is as expeditious as practicable.

Comment 10: This is not a situation where the states have adopted all available measures and still show nonattainment due solely to transport. The states have refused to even identify the levels of VOC and NO_x emissions that would be consistent with attainment in the absence of NO_x reductions that would be required by the NO_x SIP call. Nor do the plans state

the level of emission reductions that would be needed to produce attainment in the absence of upwind reductions. EPA cannot rationally find that transported NO_x renders attainment impracticable in the serious areas, when the states have neither quantified the reductions needed locally to attain in the absence of transport reductions, nor shown that such reductions are unachievable through adoption of additional state and local control measures.

Response 10: EPA in its Responses has provided an extensive analysis of the role of transport in downwind nonattainment for the serious areas. In the NO_x SIP call, EPA concluded that "EPA believes that available modeling analyses demonstrate that upwind reductions are necessary to help downwind areas come into attainment." 63 FR 57404 (October 27, 1998). These downwind areas included the areas being granted attainment date extensions here. The D.C. Circuit upheld EPA's conclusion in *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000). The SIP call and the modeling done by the states support the conclusion that the affected areas cannot attain without upwind reductions. Congress intended that upwind areas be responsible for pollution that interferes with downwind nonattainment, while at the same time requiring that downwind areas be accountable for locally generated emissions. The Clean Air Act reflects Congressional intent that downwind areas not be compelled to compensate for lack of upwind controls through the adoption of additional state and local control measures, as commenter suggests. EPA disagrees with commenter's suggestion that the downwind areas must show that no further local reductions are achievable before relying on upwind areas to shoulder responsibility for the pollution they generate. EPA finds that a reading of the Clean Air Act shows that Congress did not intend for downwind areas to be forced to impose additional local controls to offset significant pollution contributions from upwind areas, before seeking relief.

Comment 11: The Plan fails to demonstrate emission reductions of 3 percent per year over each three year period after 1999 until attainment. Assuming a 2005 attainment date, the plan must provide for a nine percent reduction in VOC and/or NO_x remissions by 2002 and another 9 percent between 2002 and 2005. The states have not attempted to demonstrate compliance with these requirements, and EPA has not proposed to find that they have been

met. EPA has no authority to waive the statutory mandate for three per cent annual reductions. Emission reductions in upwind states do not waive the statutory requirement for 3 percent annual emission reductions within the downwind nonattainment area.

Response 11: EPA's guidance did not interpret the period of time after granting the attainment date extension based on transport as requiring additional rate of progress increments from the downwind area, since we determined that the reason the area had not attained was due to upwind transport. Therefore it would be unreasonable to lock the downwind area into fixed progress requirement reductions from local sources, when the combination of local reductions with upwind area source emission reductions is what will bring the area into attainment. In any event, to the extent that it should be determined otherwise, and that any ROP required should be imposed on the downwind area, this requirement would not attach until EPA grants the attainment date extension and provides the area with a later attainment date. Since the requirement was not previously due, fulfilling the requirement, if any is deemed to exist, is not a condition of receiving the attainment date extension.

Comment 12: EPA has no legal authority to extend the one-hour attainment date. Such extension is unlawful and unwise. Under the explicit provisions of Section 181(a)(1) of the CAA, the states are required to attain the one-hour ozone standard as expeditiously as practicable, but no later than November 15, 1999. EPA cannot create exemptions from this requirement.

Response 12: EPA has responded extensively to issues pertaining to the legality of the attainment date extension in its March 1999 responses, above.

B. Attainment Demonstrations—Weight of Evidence

Comment 1: The weight of evidence approach does not demonstrate attainment or meet CAA requirements for a modeled attainment demonstration. Commenters added several criticisms of various technical aspects of the weight of evidence approach, including certain specific applications of the approach to particular attainment demonstrations. These comments are discussed in the following response.

Response 1: Under section 182(c)(2) and (d) of the CAA, serious and severe ozone nonattainment areas were required to submit by November 15, 1994, demonstrations of how they

² The states of DE, PA, CT, MA, RI, MD, NY, NJ have submitted NO_x SIP call plans providing for reductions by 2003. EPA has fully approved three of these plans (CT, MA, RI).

would attain the 1-hour standard. Section 182(c)(2)(A) provides that "[t]his attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective." As described in more detail below, the EPA allows states to supplement their photochemical modeling results, with additional evidence designed to account for uncertainties in the photochemical modeling, to demonstrate attainment. This approach is consistent with the requirement of section 182(c)(2)(A) that the attainment demonstration "be based on photochemical grid modeling," because the modeling results constitute the principal component of EPA's analysis, with supplemental information designed to account for uncertainties in the model. This interpretation and application of the photochemical modeling requirement of section 182(c)(2)(A) finds further justification in the broad deference Congress granted EPA to develop appropriate methods for determining attainment, as indicated in the last phrase of section 182(c)(2)(A).

The flexibility granted to EPA under section 182(c)(2)(A) is reflected in the regulations EPA promulgated for modeled attainment demonstrations. These regulations provide, "The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in [40 CFR part 51 Appendix W] (Guideline on Air Quality Models)." ³ 40 CFR 51.112(a)(1). However, the regulations further provide, "Where an air quality model specified in appendix W . . . is inappropriate, the model may be modified or another model substituted [with approval by EPA, and after] notice and opportunity for public comment. . . ." Appendix W, in turn, provides that, "The Urban Airshed Model (UAM) is recommended for photochemical or reactive pollutant modeling applications involving entire urban areas," but further refers to EPA's modeling guidance for data requirements and procedures for operating the model. 40 CFR 51 App. W section 6.2.1.a. The modeling guidance discusses the data requirements and operating procedures, as well as interpretation of model results as they relate to the attainment demonstration. This provision references guidance published in 1991,

but EPA envisioned the guidance would change as we gained experience with model applications, which is why the guidance is referenced, but does not appear, in Appendix W. With updates in 1996 and 1999, the evolution of EPA's guidance has led us to use both the photochemical grid model, and additional analytical methods approved by EPA.

The modeled attainment test compares model predicted 1-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. The results may be interpreted through either of two modeled attainment or exceedance tests: a deterministic test or a statistical test. Under the deterministic test, a predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to not exceed the standard. Under the statistical test, attainment is demonstrated when all predicted (i.e., modeled) 1-hour ozone concentrations inside the modeling domain are at, or below, an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episode modeled).⁴

In 1996, EPA issued guidance⁵ to update the 1991 guidance referenced in 40 CFR 50 App. W, to make the modeled attainment test more closely reflect the form of the NAAQS (i.e., the statistical test described above), to consider the area's ozone design value and the meteorological conditions accompanying observed exceedances, and to allow consideration of other evidence to address uncertainties in the modeling databases and application. When the modeling does not conclusively demonstrate attainment, EPA has concluded that additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The inherent imprecision of the model means that it may be inappropriate to view the specific numerical result of the model as the only determinant of whether the SIP controls are likely to lead to attainment. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely to be achieved. The

process by which this is done is called a weight of evidence (WOE) determination. Under a WOE determination, the state can rely on, and EPA will consider in addition to the results of the modeled attainment test, other factors such as other modeled output (e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances, and predicted change in the ozone design value); actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; and the responsiveness of the model predictions to further controls.

In 1999, EPA issued additional guidance⁶ that makes further use of model results for base case and future emission estimates to predict a future design value. This guidance describes the use of an additional component of the WOE determination, which requires, under certain circumstances, additional emission reductions that are or will be approved into the SIP, but that were not included in the modeling analysis, that will further reduce the modeled design value. An area is considered to monitor attainment if each monitor site has air quality observed ozone design values (4th highest daily maximum ozone using the three most recent consecutive years of data) at or below the level of the standard. Therefore, it is appropriate for EPA, when making a determination that a control strategy will provide for attainment, to determine whether or not the model predicted future design value is expected to be at or below the level of the standard. Since the form of the 1-hour NAAQS allows exceedances, it did not seem appropriate for EPA to require the test for attainment to be "no exceedances" in the future model predictions. The method outlined in EPA's 1999 guidance uses the highest measured design value from all sites in the nonattainment area for each of three years.⁷ The three year "design value"

⁶ "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: <http://www.epa.gov/ttn/scram>.

⁷ A commenter criticized the 1999 guidance as flawed on grounds that it allows the averaging of the three highest air quality sites across a region, whereas EPA's 1991 and 1996 modeling guidance requires that attainment be demonstrated at each site. This has the effect of allowing lower air quality concentrations to be averaged against higher concentrations thus reducing the total emission reduction needed to attain at the higher site. The commenter's concern is misplaced. EPA relies on this averaging only for purposes of determining one component, the amount of additional emission reductions not modeled, of the WOE determination. The WOE determination, in turn, is intended to be

³ The August 12, 1996 version of "Appendix W to Part 51—Guideline on Air Quality Models" was the rule in effect for these attainment demonstrations. EPA is proposing updates to this rule which will not be in effect until the new rule is promulgated.

⁴ Guidance on the Use Of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA-454/B-95-007, June 1996.

⁵ *Ibid.*

represents the air quality observed during the time period used to predict ozone for the base emissions. This is appropriate because the model is predicting the change in ozone from the base period to the future attainment date. The three yearly design values (highest across the area) are averaged to account for annual fluctuations in meteorology. The result is an estimate of an area's base year design value. The base year design value is multiplied by a ratio of the peak model predicted ozone concentrations in the attainment year (*i.e.*, average of daily maximum concentrations from all days modeled) to the peak model predicted ozone concentrations in the base year (*i.e.*, average of daily maximum concentrations from all days modeled). The result is an attainment year design value based on the relative change in peak model predicted ozone concentrations from the base year to the attainment year. Modeling results also show that emission control strategies designed to reduce areas of peak ozone concentrations generally result in similar ozone reductions in all core areas of the modeling domain, thereby providing some assurance of attainment at all monitors.

In the event that the attainment year design value is above the standard, the 1999 guidance provides a method for identifying additional emission reductions, not modeled, which at a minimum provide an estimated attainment year design value at the level of the standard. This step uses a locally derived factor which assumes a linear relationship between ozone and the precursors. Although a commenter criticized this technique for estimating ambient improvement because it does not incorporate complete modeling of the additional emissions reductions, the regulations do not mandate or nor does EPA guidance suggest that States must model all control measures being implemented. Moreover, a component of this technique—the estimation of future design value, should be considered a model predicted estimate. Therefore, results from this technique are an extension of “photochemical grid” modeling and are consistent with Section 182(c)(2)(A). Also, a commenter believes EPA has not provided sufficient opportunity to evaluate the calculations used to estimate additional emission reductions. EPA provided a full 60-day period for comment on all aspects of the proposed rule. EPA has received several

comments on the technical aspects of the approach and the results of its application, as discussed above and in the responses to the individual SIP's.

A commenter states that, application of the method of attainment analysis in the December 16, 1999 guidance will yield a lower control estimate than if we relied entirely on reducing maximum predictions in every grid cell to less than or equal to 124 ppb on every modeled day. However, this approach may overestimate needed controls (e.g., the form of the standard allows up to 3 exceedances in 3 years in every grid cell; and if the model over predicts observed concentrations, predicted controls may also be overestimated, etc.). In recognition of this EPA has considered other evidence to make these determinations, as described above through the weight of evidence determination.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the WOE determination, EPA has made these determinations based on all of the information presented by the States and available to EPA. The information considered includes model results for the majority of the control measures. Though all measures were not modeled, EPA reviewed the model's response to changes in emissions as well as observed air quality changes to evaluate the impact of a few additional measures, not modeled. EPA's decision was further strengthened by each State's commitment to check progress towards attainment in 2003 and to adopt additional measures, if the anticipated progress is not being made.

A commenter further criticized EPA's technique for estimating the ambient impact of additional emissions reductions not modeled on grounds that EPA employed a rollback modeling technique that, according to the commenter, is precluded under EPA regulations. The commenter explained that 40 CFR 51 App. W section 6.2.1.e. provides, “Proportional (rollback/forward) modeling is not an acceptable procedure for evaluating ozone control strategies.” Section 14.0 of appendix W defines “rollback” as “a simple model that assumes that if emissions from each source affecting a given receptor are decreased by the same percentage, ambient air quality concentrations decrease proportionately.” Under this approach if 20% improvement in ozone is needed for the area to reach attainment, it is assumed a 20% reduction in VOC would be required. There was no approach for identifying NO_x reductions. The “proportional

rollback” approach is a purely empirically/mathematically derived relationship, and is not what EPA did. The prohibition in Appendix W applies to the use of a rollback method which is empirically/mathematically derived and independent of model estimates or observed air quality and emissions changes as the sole method for evaluating control strategies. For the demonstrations under proposal, EPA used a locally derived (as determined by the model and/or observed changes in air quality) ratio of change in emissions to change in ozone to estimate additional emission reductions to achieve an additional increment of ambient improvement in ozone. This did assume a linear relationship between the precursors and ozone for a small amount of ozone improvement. EPA has generally relied on photochemical modeling to evaluate the attainment demonstrations and their control strategies, and has used locally derived adjustment factors as a component to estimate the extent to which additional emissions reductions—not the core control strategies—would reduce ozone levels and thereby strengthen the weight of evidence test. This limited use of adjustment factors is more technically sound than the unacceptable use of proportional rollback. The limited use of adjustment factors is more practical in light of the uncertainty in the modeling, the resources and time required to perform additional modeling, and the requirement that areas perform a progress check by the end of 2003.

Contrary to concerns expressed by a commenter, EPA did not err by modifying the modeling requirements without first proposing to do so. Section 3.0 of appendix W states, “It should not be construed that the preferred models identified here are the only models available for relating emissions to air quality.” Section 3.2.2 of Appendix W further provides that the “determination of acceptability of a model is a Regional Office responsibility. Where the Regional Administrator finds that an alternative model is more appropriate than a preferred model, that model may be used subject to the recommendations in appendix W. This finding will normally result from a determination that (1) a preferred air quality model is not appropriate for the particular application; or (2) a more appropriate model or analytical procedure is available and is applicable.” Therefore, EPA does have the discretion to identify a more appropriate analytical procedure without undergoing rulemaking on

a qualitative assessment of whether additional factors (including the additional emissions reductions not modeled), taken as a whole, indicate that the area is more likely than not to attain.

updates to Appendix W. Also, as discussed above, by reference to the modeling guidance, Appendix W was designed to allow changes in the predictive tools and data bases without undergoing additional rulemaking. In any event, the EPA is taking comment during the SIP rulemaking process on the application of its guidance.

A commenter also expressed concern than EPA applied unacceptably broad discretion in fashioning and applying the WOE determinations. EPA disagrees. The WOE determinations are made on a case-by-case basis. EPA has approved attainment demonstrations based on WOE determinations, generally with a requirement for additional reductions not modeled, only when the photochemical modeling provides a basis for believing that the SIP controls will achieve substantial ozone reductions, if not attainment levels. The fact that the WOE factors are incremental and differ between demonstrations, leads EPA to conclude these determinations may be made on a case-by-case basis, without hard-and-fast guidelines. Moreover, EPA believes that the WOE approach is bounded by the strength of the various factors that may be applied. The commenter added, as an example, EPA's application of the WOE approach to the Washington, D.C. attainment demonstration where modeling showing an ozone level (as adjusted) of 142 ppb was compared to the acceptable upper limit of 137 ppb. The commenter observed that EPA adjusted the modeled prediction on average by a factor of 19% to account for model over prediction, and stated that such an adjustment was not appropriate. In EPA's view, the 19% over prediction that underlies the 142 ppb level is only a rough approximation of the extent of modeling uncertainty. In EPA's view, consideration of model performance (specifically, a bias to under- or over-predict ozone levels) is one way to assess modeling uncertainty. To further address uncertainty, EPA applied the 1999 guidance to estimate the future design, in the same manner as applied to all of the other attainment demonstrations received. Both the assessment of model performance and the estimated future design value were used in the WOE determination.⁸

⁸ Observing that for the attainment demonstration for the Washington, D.C. area, EPA reduced modeled ozone values by 19% to account for model overprediction, a commenter criticized this technique as lacking technical justification. EPA guidance recommends assessment of model performance (both over- and under-prediction) as one of the factors affecting the model results. In general performance measures that fall within EPA recommended ranges are considered as an indication that the model is performing acceptably.

The commenter also complained that EPA has applied the WOE determinations to adjust modeling results only when those results indicate nonattainment, and not when they indicate attainment. WOE is not used to adjust model results. WOE is additional analysis that is reviewed when there is reason to question the attainment demonstration. For the current demonstrations under proposal, EPA's decision to approve the demonstrations relied not only on the modeling, but other WOE, as well. For example, EPA considered current air quality, model performance (over-as well as under-prediction), number of episode days, model predicted future design values, and results from the regional modeling for the NO_x SIP call, where applicable. For a given attainment demonstration any one of these elements could have indicated the area may not attain. But collectively the information supported EPA's decision. EPA has applied WOE determinations to all of the current demonstrations under proposal, although except for the Chicago and Milwaukee attainment demonstrations, the modeling results submitted do not pass the recommended "modeled attainment test." Reference the individual proposals for how WOE was applied in each case. These determinations were made based on EPA's best understanding of the problem and relied on a qualitative assessment as well as quantitative assessments of the available information. In some cases, EPA believed the demonstration of attainment was not conclusive, and in these cases EPA made the determination that additional emission reductions were needed to strengthen the demonstration.

The commenter further criticized EPA's application of the WOE determination on grounds that EPA

For the Washington, D.C. area, EPA explained how performance was more closely reviewed and used as part of the WOE. The technique is described in "Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area," November 30, 1999. The modeled peak ozone results generally correlated (in geographic proximity) with the monitored peak ozone emissions (and the modeled plume generally correlated (in geographic proximity) with the observed ozone plume), except that the peak modeled ozone levels averaged approximately 19–20% higher than the peak monitored levels. Modeling uncertainties (including, for example, the non-linearity of the modeling) lead EPA to conclude that adjusting each modeled peak by the 19% average over-prediction was at least as sensible as adjusting each modeled peak by an amount that corresponds to that modeled peak's relationship to the monitored ozone value in the same vicinity.

ignores evidence indicating that continued nonattainment is likely, such as, according to the commenter, monitoring data indicate that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM model. EPA did consider the monitoring data along with other information in these determinations. When reviewing the monitoring data, EPA considered other factors. For example, high monitoring values may have occurred for many reasons including, fluctuations due to changes in meteorology and lack of emission reductions. The 1999 monitor values do not reflect several control programs, both local and the regional which are scheduled for implementation in the next several years. And the 1999 meteorology in the Northeast was such that July 1999 was one of the warmest (ranked 9th) ever experienced since 1895.⁹ In addition to the heat, the middle and southern portions of the Northeast were also drier than average during this month. This information supports EPA's belief that the high exceedances observed in 1999 are not likely to reoccur frequent enough to cause a violation, once the controls adopted in these SIP's are implemented. There is little evidence to support the statement that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM. Since areas did not model 1999 ozone levels using 1999 meteorology and 1999 emissions which reflect reductions anticipated by control measures, that are or will be approved into the SIP, there is no way to determine how the UAM predictions for 1999 compare to the 1999 air quality. Therefore, we can not determine whether or not the monitor values exceed the NAAQS by a wider margin than the UAM predictions for 1999. In summary, there is little evidence to support the conclusion that high exceedances in 1999 will continue to occur after adopted control measures are implemented.

In addition, the commenter argued that in applying the WOE determinations, EPA ignored factors showing that the SIPs under-predict future emissions, and the commenter included as examples certain mobile source emissions sub-inventories. EPA did not ignore possible under-prediction in mobile emissions. EPA is presently

⁹ <http://www.ncdc.noaa.gov/ol/climate/research/1999/perspectives.html> and "Regional Haze and Visibility in the Northeast U.S.," NESCAUM at <http://www.nescaum.org/pdf/publist.pdf>

evaluating mobile source emissions data as part of an effort to update the computer model for estimating mobile source emissions. EPA is considering various changes to the model, and is not prepared to conclude at this time that the net effect of all these various changes would be to increase or decrease emissions estimates. For attainment demonstration SIPs that rely on the Tier 2/Sulfur program for attainment or otherwise (*i.e.*, reflect these programs in their motor vehicle emissions budgets), States have committed to revise their motor vehicle emissions budgets after the MOBILE6 model is released. EPA will work with States on a case-by-case basis if the new emission estimates raise issues about the sufficiency of the attainment demonstration. Corrections, if needed, will be made in time for the progress check in 2003 and if the analysis indicates additional measures are needed, EPA will take the appropriate action.

Comment 2: Commenters state that even with the upwind NO_x reductions anticipated by EPA's NO_x SIP Call Rule, neither photochemical grid modeling conducted by MA and other New England states, nor the so-called "weight-of-evidence" approach demonstrates that MA will achieve attainment by 1999, by 2003 or by any other date.

Response 2: The Springfield, Massachusetts 1-hour ozone attainment demonstration is based on photochemical grid modeling and weight of evidence analyses as recommended in the guidance.¹⁰ Comments on the use of this approach and its consistency with Section 182(c)(2)(A) of the CAA are discussed in response 1 above of section VII.B. This guidance allows the use of a WOE analysis to support a modeled control strategy that does not predict concentrations that are at or below the 1-hour ozone NAAQS compliance level of 124 ppb.

Using estimated emissions for 1999 the model predicts a maximum 1-hour concentration of 168 ppb. However, based on 1997–1999 observations the area's design value is 128 ppb. It thus appears that the area's air quality is improving at a faster rate than what the model predicts. Or the differences

between model predictions and observations may be due to model inputs such as emission estimates and/or meteorology assumptions. This example highlights why use of a single model prediction as the determining factor may not be appropriate. To further address this issue, EPA used the model predictions before and after controls to estimate the expected change in ozone and predict a future design value, as described in the guidance, "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled." The predicted future design value from this analysis indicates the area will attain through implementation of the control measures modeled.

There are five ozone air quality monitors in the Springfield, Massachusetts nonattainment area. They are in the towns of Chicopee, Agawam, Ware, Adams and Amherst. The monitor in Adams is in a remote mountaintop location and has only recorded two exceedances of the 1-hour ozone standard since 1989 and is clearly in attainment with the ozone standard and therefore is not an issue vis-a-vis attainment/nonattainment. The other four monitors were all recording violations of the 1-hour ozone standard when the area was classified as serious in 1991 (based on ozone data from 1987 to 1989). Since the original classification, all of these sites have shown a substantial decrease in ozone due to emission reductions, both within Massachusetts and also upwind from Massachusetts. The Ware site with a 1999 design value of 128 ppb, is the only site in western Massachusetts that recorded violations of the ozone standard based on 1997–1999 data. A linear fit of those two design values (167 ppb in 1989 and 128 ppb in 1999) shows a drop of over 3 ppb per year of ozone. This observed rate of improvement in air quality per reduction in emissions is consistent with the analyses of the modeling results for the NO_x SIP call and the local control measures and supports the expectation that a 4 ppb improvement in ozone will occur by 2003, and very likely sooner.

It must be noted that the year-to-year decline in ozone levels is rarely linear and year-to-year variations do occur, but, since these four ozone sites all show a substantial downward trend in one-hour ozone concentrations, and precursor emissions are projected to keep falling, both within the nonattainment area and upwind from it, there is no reason to believe that this downward trend will not continue. The emission reductions will be a result of

the following: the mobile fleet (*i.e.* cars) turnover, reductions from large point sources due to the OTC NO_x Memorandum of Understanding (MOU) and additional reductions from the NO_x SIP call. In addition, Phase II reformulated gasoline, and ultimately Tier 2 automobile standards and low sulphur gasoline, along with other federal control measures (*i.e.* controls on non-road engines) should maintain the downward trend in both emissions and ambient concentrations. Also, Massachusetts started an enhanced I/M program in Oct. 1999 which will yield additional emission reductions.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the WOE determination, EPA has made this determination based on all of the information presented by the State and available to EPA. This includes model results for the local control measures and the regional NO_x SIP call along with additional analyses of air quality data and estimates of future design values. Therefore, EPA believes that western Massachusetts will attain the standard, as expeditiously as practicable, through implementation of adopted local controls and regional NO_x reductions.

C. Reliance on NO_x SIP Call and Tier II Modeling

Comment: Given the uncertainty surrounding the NO_x SIP Call at the time of EPA's proposals on the attainment demonstrations, there is no basis for the conclusion reached by EPA that states should assume implementation of the NO_x SIP Call, or rely on it as a part of their demonstrations. The commenter references modeling data which demonstrates that the benefits of imposing NO_x SIP Call controls are limited to areas near the sources controlled.

The commenter adds that there are errors in the emissions used for the NO_x SIP Call Supplemental Notice (SNPR). The commenter believes that because of inaccurate inventories the modeling analyses, estimates of air quality based on that modeling, and estimates of EPA's Tier II tailpipe emissions reduction program not modeled in the demonstrations, are also flawed.

Response: In *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000), the court upheld the NO_x SIP Call on most issues, although a subsequent order of the court delays the implementation date to no later than May 31, 2004. EPA is moving forward to implement those portions of the rule that have been upheld, ensuring

¹⁰ "Guideline for Regulatory Application of the Urban Airshed Model", EPA-450/4-91-013, July 1991; "Guidance on the Use Of Modeled Results to Demonstrate Attainment of the ozone NAAQS," EPA-454/B-95-007, June 1996; and "Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled," EPA, November 1999, Web site: <http://www.epa.gov/ttn/scramp>.

that most—if not all—of the emission reductions from the NO_x SIP call assumed by the States in their 1-hour ozone NAAQS attainment demonstrations will occur. EPA's modeling to determine the region-wide impacts of the NO_x SIP call clearly shows that regional transport of ozone and its precursors is impacting nonattainment areas several states away, and this analysis was upheld by the court. Therefore, it is appropriate for States to assume implementation of the NO_x SIP Call.

The EPA considered many factors when making these determinations. No single piece of information was determinant. It is important to recognize that the regional modeling for the Tier II rule was not used in the 1-hour attainment demonstrations and that the SNPR modeling was only one of several factors considered. EPA's decision was based on a qualitative assessment of the information presented. Information reviewed included results of the modeled attainment test, along with other supplemental information such as other modeled outputs (e.g., changes in the predicted frequency and pervasiveness of 1-hour ozone NAAQS exceedances and predicted changes in the ozone design value); actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; base year model performance; SNPR derived future design values; the responsiveness of the model predictions to further controls; and for some of the demonstrations estimates of additional emission reductions. EPA recognizes that any and all of this information has some degree of uncertainty, including the SNPR modeling. EPA recognizes that these uncertainties should be considered when making these determinations and that is why EPA considered other factors. EPA's weight of evidence determinations are not affected by error in any one piece of the information.

D. Impact of the NO_x SIP Call on Attainment of the 1-Hour NAAQS

Comment: One commenter states that Massachusetts's NO_x emissions interfere with attainment in downwind areas of New Hampshire and Maine and that Connecticut's NO_x emissions interfere with attainment in downwind areas of Massachusetts, New Hampshire and Maine. Therefore, the commenter states that significant additional NO_x reductions are needed for these areas to attain the 1-hour ozone NAAQS. The commenter also remarked that neither Massachusetts nor Connecticut has committed to adequate emission control strategies.

Response: In the final rule for the NO_x SIP Call (63 FR 57394, October 27, 1998), EPA indicated that Massachusetts contains sources that contribute significantly to 1-hour nonattainment in Maine and New Hampshire, and that Connecticut contains sources that contribute significantly to 1-hour nonattainment in Massachusetts, Maine and New Hampshire. The NO_x SIP Call rule specified the emissions that Connecticut and Massachusetts were required to regulate to address their significant contribution to nonattainment in these downwind States. Massachusetts submitted a rule meeting the NO_x SIP call on November 19, 1999, and EPA proposed approval of this rule on July 12, 2000 (65 FR 42907). Similarly, Connecticut submitted a rule in response to the NO_x SIP call on October 1, 1999, and EPA proposed approval on July 12, 2000 (65 FR 42900). On October 20, 2000, the Regional Administrator signed notices fully approving these rules. As of December 21, 2000, this approval was awaiting publication. These rules have addressed Massachusetts's and Connecticut's contribution to ozone nonattainment in downwind areas. In addition, recent air quality monitoring data for 1998–2000, which have been quality assured, indicate that the Portland, ME, and Portsmouth-Dover-Rochester, NH, ozone nonattainment areas no longer violate the 1-hour ozone NAAQS.

E. RACM (Including Transportation Control Measures)

1. Comments on December 16, 1999 Proposal

Comment: Several commenters have stated that there is no evidence in several states that they have adopted reasonably available control measures (RACM) or that the SIPs have provided for attainment as expeditiously as practicable. Specifically, the lack of Transportation Control Measures (TCMs) was cited in several comments, but potential stationary source controls were also covered. One commenter stated that mobile source emission budgets in the plans are by definition inadequate because the SIPs do not demonstrate timely attainment or contain the emissions reductions required for all RACM. That commenter claims that EPA may not find adequate a motor vehicle emission budget (MVEB) that is derived from a SIP that is inadequate for the purpose for which it is submitted. The commenter alleges that none of the MVEBs submitted by the states that EPA is considering for adequacy is consistent with either the

level of emissions achieved by implementation of all RACM; nor are they derived from SIPs that provide for attainment. Some commenters stated that for measures that are not adopted into the SIP, the State must provide a justification for why they were determined to not be RACM.

Response: The EPA reviewed the SIP submittals for the four serious areas (Greater Connecticut, Western Massachusetts (Springfield); Washington, D.C.-Virginia-Maryland; and Atlanta, Georgia¹¹) and determined that they did not include sufficient documentation concerning available RACM measures. Therefore, EPA reviewed numerous potential RACM measures. As part of this review, EPA developed an analysis, which has been placed in the dockets for the SIPs for the serious areas to help address this issue: "RACM Analysis for Four Serious Areas Designated Nonattainment for 1-hr Ozone NAAQS." U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; and Office of Transportation and Air Quality, Ann Arbor, MI 48105. October 12, 2000. An electronic version of EPA's RACM analysis cited above can be downloaded at www.epa.gov/ttn/rto under "What's New." The EPA published a notice of availability of this material on October 16, 2000 (65 FR 61134) and provided initially a 15 day public comment period on the material. The EPA extended the public comment period on this supplemental material for an additional 15 days in a notice published November 2, 2000 (65 FR 65818) and corrected on November 9, 2000 (65 FR 67319).

Section 172(c)(1) of the CAA requires SIPs to contain RACM and provides for areas to attain as expeditiously as practicable. EPA has previously provided guidance interpreting the requirements of 172(c)(1). See 57 FR 13498, 13560. In that guidance, EPA indicated its interpretation that potentially available measures that would not advance the attainment date for an area would not be considered RACM. EPA also indicated in that guidance that states should consider all potentially available measures to determine whether they were reasonably available for implementation in the area, and whether they would advance the attainment date. Further, states should indicate in their SIP submittals whether measures

¹¹ This response to comment document will not address Atlanta; that will be addressed in the future when EPA takes final rulemaking action on the Atlanta SIP.

considered were reasonably available or not, and if measures are reasonably available they must be adopted as RACM. Finally, EPA indicated that states could reject measures as not being RACM because they would not advance the attainment date, would cause substantial widespread and long-term adverse impacts, or would be economically or technologically infeasible. The EPA also issued a recent memorandum re-confirming the principles in the earlier guidance, entitled, "Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas." John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: <http://www.epa.gov/ttn/oarpg/t1pgm.html>.

The EPA's RACM analysis cited above evaluated emission levels of oxides of nitrogen and volatile organic compounds and their relationship to the application of current and anticipated control measures expected to be implemented in four serious one-hour ozone nonattainment areas. This analysis was done to determine if additional RACM are available after adoption of Clean Air Act required measures for the four serious ozone nonattainment areas. The analysis supplemented the December 16, 1999 proposals to approve the 1-hour O₃ NAAQS attainment demonstrations in these areas.

Based on this analysis and other information discussed below, EPA concluded that additional emission control measures would not advance the attainment date and therefore do not constitute RACM in three nonattainment areas: Greater Connecticut; Springfield, Massachusetts; and Metropolitan Washington. The EPA therefore concludes that the SIPs for these areas meet the requirement for adopting RACM.

In addition to control measures already implemented locally, each of the three areas relies in large part on reductions from outside the nonattainment areas from EPA's NO_x SIP call rule or section 126 rule (65 FR 2674, January 18, 2000) to reach attainment. In the NO_x SIP call, 63 FR 57356, EPA concluded that reductions from various upwind states were necessary to provide for timely attainment in nonattainment areas in various downwind states, including all four of the nonattainment areas that were the subject of this analysis. The NO_x SIP call therefore established requirements for control of sources of

significant emissions in all upwind states. However, these reductions were not slated for full implementation until May 2003. Further, the United States Court of Appeals for the District of Columbia Circuit recently ordered that EPA could not require SIPs to provide for full implementation of the NO_x SIP call prior to May 2004. *Michigan, et al., v. EPA*, D.C. Cir. No. 98-1497, Order of Aug. 30, 2000.¹²

The attainment demonstrations for these three serious areas indicate that the ozone benefit expected to be achieved from regional NO_x reductions (such as the NO_x SIP call) are substantial. (See the individual attainment demonstrations in the docket for each of these areas.)

EPA had proposed to approve an attainment date extension beyond the original attainment date specified in the Clean Air Act (November 1999) for each of the three serious areas: to 2007 for Greater Connecticut; to 2003 for Western Massachusetts; and to 2005 for Metropolitan Washington. The rationale for such extensions is discussed in detail extensions elsewhere in this response to comments document. See section VII.A. Briefly, however, the extensions are being given mainly due to the fact that these areas will have to rely on emission reductions from upwind areas. Some of those upwind reductions will be provided under the NO_x SIP call rule with compliance in 2004, and from the section 126 rule, with compliance in 2003.

In Western Massachusetts, some of the measures designed to achieve emissions reductions from within the nonattainment area—in particular, the regional NO_x reductions—will also not be fully implemented until just prior to each area's respective attainment date. One could argue that the local measures needed for attainment in this area could be implemented earlier and advance attainment. Additional reductions beyond those already provided for in the SIP for this area could potentially be implemented in the interim period prior to the reductions from these upwind controls; however, they would only be needed for an interim period of time, after which the State could actually replace them if the State submits a new attainment demonstration showing they were no longer necessary. The interim implementation of such measures could likely result in cases where sources would have to install controls, and then would be relieved of such

responsibility, which could be disruptive. Thus, EPA believes this situation—where the local controls would only marginally advance attainment—supports a finding that the additional controls would not be considered RACM.

Also, the development of rules for sources in the Springfield, Massachusetts nonattainment area for which little control information may exist—especially a large number of very different source categories of small sources—will likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from upwind controls, such as the NO_x SIP call rule and the section 126 rule.

One could also argue that the measures needed in the upwind area that is affecting the area in question could be implemented earlier and therefore could result in earlier attainment. The EPA recognizes that it has not taken final rulemaking on the severe areas that affect the three serious areas in question (New York for the Greater Connecticut and Springfield, Massachusetts nonattainment areas, and Baltimore for the Metropolitan Washington nonattainment area). However, since EPA must take rulemaking action on the three serious areas at this time, and because it does not have information to the contrary at this point, EPA must presume the attainment dates submitted by the States and for which EPA proposed approval on December 16, 1999, and therefore presume that emission controls for those severe areas will be implemented as expeditiously as practicable on a schedule to achieve those reductions. Because EPA proposed to approve the attainment dates for the severe areas in question, it is reasonable to assume that the severe areas cannot implement their measures to achieve attainment any more expeditiously.

Thus, EPA believes that implementation of additional measures in the Springfield, Massachusetts area will not advance the attainment date, prior to the time of full implementation of the SIP call and/or the section 126 rule.

Therefore, EPA concludes, based on the available documentation, that the reductions from additional control measures will not advance attainment, and thus none of these potential

¹² Several States (DE, PA, CT, MA, RI, MD, NY, NJ) have submitted plans providing for reductions by 2003. EPA has fully approved three of these plans (CT, MA, RI).

measures analyzed can be considered RACM for purposes of section 172(c)(1) for western Massachusetts for its 1-hour ozone standard attainment demonstration.

Although EPA does not believe that section 172(c)(1) requires implementation of additional measures for these three serious areas, this conclusion is not necessarily valid for other areas. For 1-hour ozone nonattainment areas classified as severe, for instance, some of which are the "upwind" areas referred to in the above responses for serious areas, such measures may in fact be RACM, and the States in which such areas are located have a responsibility to perform an analysis of whether additional measures are RACM. EPA is about to issue additional guidance concerning the RACM requirement for the severe areas. In addition, if in the future EPA moves forward to implement another ozone standard, this RACM analysis would not control what is RACM for these or any other areas for that other ozone standard.

Also, EPA has long advocated that States consider the kinds of control measures that the commenters have suggested, and EPA has indeed provided guidance on those measures. See, e.g., <http://www.epa.gov/otaq/transp.htm>. In order to demonstrate that they will attain the 1-hour ozone NAAQS as expeditiously as practicable, some areas may need to consider and adopt a number of measures—including the kind that EPA itself evaluated in the RACM analysis for the three serious areas—that even collectively do not result in many emission reductions. Furthermore, EPA encourages areas to implement technically available and economically feasible measures to achieve emissions reductions in the short term—even if such measures do not advance the attainment date—since such measures will likely improve air quality. Also, over time, emission control measures that may not be RACM now for an area may ultimately become feasible for the same area due to advances in control technology or more cost-effective implementation techniques. Thus, areas should continue to assess the state of control technology as they make progress toward attainment and consider new control technologies that may in fact result in more expeditious improvement in air quality.

Discussion of other factors related to RACM, such as economic and technological feasibility, are discussed below in responses to comments on EPA's RACM analysis.

Elsewhere in this response to comments, EPA addresses the issue of whether the attainment dates are as expeditious as practicable and that discussion is not repeated here.

EPA previously responded to comments concerning the adequacy of MVEBs when EPA took final action determining the budgets adequate and does not address those issues again here. The responses are found at <http://www.epa.gov/oms/transp/conform/pastsips.htm>.

Comments on the supplemental material were received from several commenters and are addressed below.

Note that the response to the comment related to severe areas will be provided at the time EPA takes final rulemaking action on those areas.

2. Comments on October 16, 2000 Notice of Availability

Comment 1: EPA cannot invent rationales for the states: EPA's role is limited to reviewing what the states have submitted, and approving or disapproving it. 42 U.S.C. 7410(k)(3); *Riverside Cement Co. v. Thomas*, 843 F.2d 1246 (9th Cir. 1988). EPA "may either accept or reject what the state proposes; but EPA may not take a portion of what the state proposes and amend the proposal ad libitum." *Id.* If states are going to reject control measures, their decision to do so and the rationale therefore must be subject to notice and hearing at the state and local level.

Response 1: The SIP submittals from the States for the Metropolitan Washington, Springfield, Massachusetts, and the Greater Connecticut nonattainment areas contained no measures adopted for the sole purpose of satisfying the RACM requirement. The public did have a chance to comment at the State level on the fact that there were no additional measures. The EPA interpreted this lack of additional measures as an indication that the State did not identify any additional measures as meeting the RACM requirement under section 172(c)(1). The EPA did not amend the SIP; EPA supplemented the rationale and approved the SIP with an explanation of why it was acceptable for the State to identify no additional measures to meet the RACM requirement of the Clean Air Act.

The commenter cites *Riverside Cement* for the proposition that EPA cannot perform an analysis of whether the State's plan complies with the CAA's RACM requirement. The EPA believes that the holding of that case is inapplicable to these facts. In *Riverside Cement*, EPA approved a control

requirement establishing an emission limit into the SIP and disregarded a contemporaneously-submitted contingency that would allow the State to modify the emission limit. Thus, the court concluded that EPA "amended" the State proposal by approving into the SIP something different than what the State had intended. 843 F.2d at 1248. In the present circumstances, EPA did not attempt to modify a substantive control requirement of the submitted plan. Rather, EPA performed additional analyses to determine if the plan, as submitted, fulfilled the substantive RACM requirement of the CAA. As a general matter, EPA believes that States should perform their own analyses of RACM (as well as submitting other supporting documents for the choices they make). The statute places primary responsibility on the States to submit plans that meet the CAA's requirements. However, nothing in the CAA precludes EPA from performing those analyses, and the CAA clearly provides that EPA must determine whether the State's submission meets the CAA's requirements. Under that authority, EPA believes that it is appropriate, though not mandated, that EPA perform independent analyses to determine whether a submission meets the requirements of the CAA. The EPA has not attempted to modify the State's submission by either adding or deleting a substantive element of the submitted plan. By virtue of the supplemental RACM analysis, EPA has concluded that the State's initial submission contains control measures sufficient to meet the RACM requirement.

Comment 2 (a): Inappropriate grounds for rejecting RACM. The commenter claims that EPA's bases for rejecting measures as RACM are inappropriate considerations: (a) The measures are "likely to require an intensive and costly effort for numerous small area sources"; or (b) the measures "do not advance the attainment dates" for the four areas. 65 FR at 61134. Neither of these grounds are legally or rationally sufficient bases for rejecting control measures.

Response 2(a): The EPA's approach toward the RACM requirement is grounded in the language of the Clean Air Act. Section 172(c)(1) states that a SIP for a nonattainment area must meet the following requirement, "In general.—Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available

control technology) and shall provide for attainment of the national primary ambient air quality standards.” [Emphasis added.] The EPA interprets this language as tying the RACM requirement to the requirement for attainment of the national primary ambient air quality standard. The CAA provides that the attainment date shall be “as expeditiously as practicable but no later than * * *” the deadlines specified in the CAA. EPA believes that the use of the same terminology in conjunction with the RACM requirement serves the purpose of specifying RACM as the way of expediting attainment of the NAAQS in advance of the deadline specified in the CAA. As stated in the “General Preamble” (57 FR 13498 at 13560, April 16, 1992), “The EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area as components of the area’s attainment demonstration.” [Emphasis added.] In other words, because of the construction of the RACM language in the CAA, EPA does not view the RACM requirement as separate from the attainment demonstration requirement. Therefore, EPA believes that the CAA supports its interpretation that measures may be determined to not be RACM if they do not advance the attainment date. In addition, EPA believes that it would not be reasonable to require implementation of measures that would not in fact advance attainment. See 57 FR 13560.

The term “reasonably available control measure” is not actually defined in the definitions in the CAA. Therefore, the EPA interpretation that potential measures may be determined not to be RACM if they require an intensive and costly effort for numerous small area sources is based on the common sense meaning of the phrase, “reasonably available.” A measure that is reasonably available is one that is technologically and economically feasible and that can be readily implemented. Ready implementation also includes consideration of whether emissions from small sources are relatively small and whether the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. As stated in the General Preamble, EPA believes that States can reject potential measures based on local conditions including cost. 57 FR 13561.

Also, the development of rules for a large number of very different source categories of small sources for which little control information may exist will

likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer the time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules in the three nonattainment areas would advance the attainment date earlier than would be achieved from the larger amount of reductions expected from upwind controls, such as from the NO_x SIP call and controls from severe areas with later statutory attainment dates.

Comment 2(b): EPA’s approach also illegally assumes that the attainment dates for these areas can be extended beyond November 15, 1999 via the Agency’s downwind transport policy.

Response 2(b): As noted above, EPA concluded that RACM is linked in the language of the Clean Air Act to the attainment date. We elsewhere respond to comments that object to EPA’s approval of attainment date extensions and do not restate those responses here. See Section VII.A. Once an attainment date is set for an area, an analysis can then be made to determine whether any additional measures that may potentially be RACM would advance that attainment date.

Comment 3: Failure to quantify reductions needed to attain sooner: Even if advancement of the attainment date were a relevant test for RACM, EPA has failed to rationally justify its claim that additional control measures would not meet that test. To begin with, neither the Agency nor the states have quantified in a manner consistent with EPA rules and guidance the emission reductions that would be needed to attain the standard prior to achievement of emission reductions required under the NO_x SIP call.

Response 3: Elsewhere in this response to comments on the proposed approval of the 1-hour ozone SIPs, EPA addresses the issue of the attainment date extension. See Section VII.A. EPA has therein justified the position that areas affected by transport may need additional time to attain—and in some cases may need an extension out to either the date the NO_x SIP call will be implemented or the attainment date of an upwind area if it cannot attain without the reductions from the upwind area. In the case of Springfield, Massachusetts, all local measures needed for attainment, except the rule Massachusetts adopted to meet the NO_x SIP call, are already being implemented. EPA considers this implementation as expeditious as practicable.

The regulation Massachusetts adopted to meet EPA’s NO_x SIP call requires

compliance with covered emission reductions in 2003, which EPA considers as expeditiously as practicable for those sources.

Comment 4: Inadequate RACM analysis: EPA’s RACM analysis is grossly inadequate in several key respects.

Comment 4(a): EPA’s analysis fails to provide the technical basis and calculations by which it developed its emission reduction estimates for various measures. EPA failed to provide citations to the literature regarding estimates of emission reductions for various TCMs. EPA failed to specify the level of implementation assumed for some of the TCMs in the analysis.

Response 4(a): EPA’s RACM analysis (found at www.epa.gov/ttn/rto) did provide the technical basis and calculations for its emission reduction estimates for controls possible for the source categories in the emission inventory. The commenter apparently believes EPA’s analysis is insufficient, however. The technical basis for the analyses and the assumptions used in the calculation of estimated emission reductions were derived from a review of the literature on the implementation and effectiveness of TCM’s.¹³ The TCMs evaluated depend on the level of implementation. Implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM’s in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Comment 4(b): EPA’s analysis looks at only a small universe of potential measures, and does not evaluate all of the measures identified in public comment and other sources.

Response 4(b): EPA’s RACM analysis was intended to address all potential categories of stationary and mobile sources that could provide additional emission reductions that might be considered RACM. The EPA believes that all identified measures were included in the categories addressed in the analysis.

¹³ Transportation Control Measures: State Implementation Plan Guidance, US EPA 1992; Transportation Control Measure Information Documents, US EPA 1992; Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature, National Association of Regional Councils 1994.

Comment 4(c): EPA's analysis also completely fails to consider the additional benefits likely from combined implementation of complementary TCMs e.g., parking management along with transit improvements. It is arbitrary and irrational for EPA to assume that these measures can and will be implemented in complete isolation from one another.

Response 4(c): EPA recognizes that many control measures—particularly TCMs—are more effective if done in conjunction with others. EPA maintains, however, that it would be impossible to analyze a seeming infinite set of combinations of measures for possible benefits. The EPA's analysis did look at all measures in various categories and concluded that as a whole these categories of measures would not advance attainment or would otherwise not be reasonably available.

Comment 5: Stationary sources: The analysis of potential emission reductions from additional stationary source measures is flawed in several key respects.

Comment 5(a): First, EPA arbitrarily excluded from any consideration the bottom 20% of the stationary source categories.

Response 5(a): EPA does not consider this exclusion arbitrary, since it was designed to eliminate from consideration controls on a number of source categories that were not expected to yield many emission reductions. The EPA believed that controls on categories with very low emission reduction potential would not constitute RACM. The fact that none of the top 80 percent of the categories considered for additional controls yielded measures that EPA considered RACM for the areas in question validates EPA's decision not to analyze separately the bottom 20 percent of the categories, which would cumulatively have achieved fewer emission reductions. Therefore, EPA concludes that control measures applied to the bottom 20 percent of the categories are also not RACM.

Comment 5(b): Second, EPA did not consider potential additional controls on electric generating units and point source combustion sources.

Response 5(b): Undoubtedly there are additional controls that could be placed on electric generating units and point source combustion sources. However, EPA believes that the implementation of the RACT requirements in nonattainment areas and, more importantly, the implementation of the NO_x SIP call in all areas affecting the nonattainment areas in general provide a level of control that represents all reasonably available controls for these

sources in the areas in question. The EPA believes that generally, the level of NO_x emissions control required under the NO_x SIP call for larger sources, including electric generating units and point source combustion sources, is greater than the level of control presumed by EPA under the NO_x RACT requirement. The NO_x SIP call is based on a level of highly cost effective controls, characterized as having a \$2000 per ton cost effectiveness or less (63 FR 57400, October 27, 1998). The presumptive level of RACT provided in EPA guidance is based on cost effectiveness up to \$1300 per ton (Memorandum of March 16, 1994, from D. Kent Berry re: "Cost-Effective Nitrogen Oxides (NO_x) Reasonably Available Control Technology (RACT)"). EPA acknowledges that controls with costs higher than \$2000 per ton are available and may be cost-effective. However, the control costs do not reflect other concerns regarding reasonableness of control. EPA received comments that predicted problems with availability of electrical generation even at the NO_x SIP call level of control; therefore, in its final NO_x SIP call rule, EPA included provisions for a NO_x supplement pool to allow more time for some units to come into compliance and thus minimize potential power availability problems. At control levels greater than those in the NO_x SIP call rule, EPA believes the time States would need to provide for sources to come into compliance while avoiding power availability problems would be more than the current amount of time for Western Massachusetts and Metropolitan Washington to attain. Therefore, EPA has determined that such additional controls do not constitute RACM.

Comment 5(c): Third, EPA assumes that only a 50% level of control is achievable for the uncontrolled emissions. This completely unsupported claim is hard to fathom.

Response 5(c): EPA's long-standing guidance on the RACT requirement for stationary sources of VOC has generally assumed a presumptive norm of 81 percent control efficiency; this efficiency was based on the assumption of a 90 percent capture efficiency and 90 percent control efficiency of the captured emissions ($0.9 \times 0.9 = 0.81$). However, the specific VOC RACT control techniques guidelines were developed for emission sources for which much information about emissions and controls was available. The RACT rules often apply to smaller sources as well as to major sources. There is not nearly as much information available concerning source categories

for which RACT guidelines have not been developed; nor is there information regarding what controls are appropriate for the smaller sources that are not already subject to RACT. Therefore, without further information, EPA was hesitant to assume an 81 percent level of control. EPA therefore chose a 50 percent level of control for VOC control, which EPA believes is reasonable in light of our limited knowledge on available controls.

The EPA established guidance to States in complying with the Clean Air Act's requirements for NO_x RACT in the NO_x Supplement to the General Preamble (57 FR 55620, November 25, 1992). That guidance addressed RACT for major stationary sources of NO_x. Under section 182(b)(2) of the CAA, moderate and higher ozone nonattainment area SIPs—and also SIPs for all areas in the Ozone Transport Region—were already required to contain provisions for applying a reasonably available level of control for NO_x for major stationary sources. For NO_x emission control for other sources, when EPA published the NO_x SIP call (63 FR 57402, October 27, 1998), EPA evaluated other levels of control for categories of stationary sources that were not included in the highly cost-effective controls assumed for establishing the level of control reflected in the Statewide NO_x emission budgets in that rule. The EPA determined that for area sources, additional controls that were technologically feasible and highly cost-effective could not be identified. The EPA determined that for small point sources, their collective emissions were relatively small and the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. Nonetheless, for the purpose of the RACM analysis, EPA did assume a level of control for sources with potential for control. In light of the lower level of confidence in information concerning NO_x controls on these sources, and the conclusion concerning cost effectiveness, however, EPA believed it had to take a more conservative approach, and thus chose a lower level of control, namely 50 percent. The EPA believes this level is reasonable in light of these facts.

Comment 6: Transportation Control Measures as RACM: EPA gives virtually no consideration to the emission reduction benefits of transportation programs, projects and services contained in adopted regional transportation plans (RTPs), or that are clearly available for adoption as part of RTPs adopted for a nonattainment area. In addition, it is arbitrary and capricious

for EPA not to require as RACM economic incentive measures that are generally available to reduce motor vehicle emissions in every nonattainment area.

Response 6: EPA's notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) does consider transportation programs, projects and services that are generally adopted, or available for inclusion in a nonattainment area's regional transportation plan and Transportation Improvement Program. The RACM analysis includes seven broad categories and twenty-seven subcategories of Transportation Control Measures that represent a range of programs, projects and services that can be included in RTP's and TIP's. The inclusion of a TCM in an RTP or TIP does not necessarily mean that it meets EPA's criteria for RACM and must be included in the SIP. EPA has concluded that implementation of these TCM's would not advance the attainment date for the Springfield, Massachusetts area, and therefore are not considered RACM for purposes of the attainment SIPs for that area.

Some of these TCM's, such as parking cashout, transit subsidies, and parking pricing, are explicitly economic incentive programs. Furthermore, these categories of TCMs, as well as most of the others, could be infinitely differentiated according to criteria, such as the method of implementation, level of promotional effort or market penetration, stringency of enforcement, etc. The application of economic incentives to increase the effectiveness of a TCM is one such criterion. These implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. EPA believes that using the midpoint level of effectiveness represents a level of implementation effort that is not so high as to be economically infeasible, nor so low as to be ineffective.

Also, there are many important reasons why a state, regional, or local planning agency might implement TCMs in an integrated traffic management plan beyond whatever air quality benefits the TCMs might generate, including preserving open space, water shed protection, avoiding sprawl, mitigating congestion, and "smart growth" planning generally. So the fact that TCMs are being implemented in certain ozone nonattainment areas does not

necessarily lead one to the conclusion that those TCMs represent mandatory RACM measures when they are analyzed primarily for the purpose of determining whether they would advance the ozone attainment date.

Comment 7: EPA did not provide sufficient notice and time to permit adequate comment.

Response 7: In its initial notice of availability of the RACM analysis (65 FR 61134, October 16, 2000) EPA offered a 15 day comment period (to October 31, 2000). On November 2, 2000 (65 FR 65818), EPA extended the comment period an additional 15 days, specifically stating that this would provide a total of 30 days for public comment. Unfortunately, that notice was published with a typographical error that appeared to extend the comment period an additional year and 15 days. Therefore, on November 9, 2000 (65 FR 67319), EPA published a correction to clearly extend the comment period 15 days from October 31, 2000, to November 15, 2000. EPA believes 30 days is an adequate period for public comment. The first notice to extend the public comment period (the November 2, 2000 notice) made it quite clear that the extension was for only 15 days to provide a total of 30 days for comment; EPA believes no possible confusion should have resulted from the fact that the end date of the comment period contained a typographical error.

Comment 8: EPA is trying to circumvent obligations under 2 Consent Decrees (*MOG v. EPA* and *NRDC v. Browner*).

Response 8: This comment refers to consent decrees filed in two cases: *NRDC v. Browner*, No. 99-2976 (D.D.C.) and *Midwest Ozone Group v. EPA*, No. 00-1047 (D.D.C.). In *NRDC*, the consent decree provides that by November 15, 2000, EPA shall propose a federal implementation plan (FIP) for the Springfield, Massachusetts; Greater Connecticut; and Metropolitan Washington D.C. nonattainment areas if EPA has not approved full attainment demonstration SIP for that area. The consent decree for *Midwest Ozone Group* is similar, but not identical. It provides that EPA shall propose federal implementation plans (FIPs) for two of the three nonattainment areas—Springfield, Massachusetts and Greater Connecticut—if EPA has not proposed approval of a full attainment demonstration SIP for that area. The EPA met its obligation under the *Midwest Ozone Group* decree when it proposed approval of the full attainment demonstration SIPs for those two areas on Dec. 16, 1999. 64 FR 70319 and 64 FR 70332. On November 6, 2000, the

District Court granted EPA's unopposed motion to extend the deadline for action under the *NRDC* decree until December 15, 2000 for each of the three areas. On December 7, 2000, the court further extended the date for EPA action with respect to Springfield until December 22, 2000. The EPA has complied with the *NRDC* consent decree with respect to the Greater Connecticut and Metropolitan Washington D.C. areas. The appropriate Regional Administrator signed a final rulemaking action approving the full attainment demonstration SIPs for those two areas on December 15, 2000. The EPA has complied with the *NRDC* consent decree with respect to the Springfield, Massachusetts because the Regional Administrator signed a final rulemaking action approving the full attainment demonstration SIP by December 22, 2000.

Comment 9: Since EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA must disapprove the SIPs and propose a FIP.

Response 9: Although EPA found that MA and CT failed to conduct an adequate RACM analysis, EPA believes it does have authority to supplement the record and conclude that the SIPs for these two areas meet the RACM requirement of the CAA. See above the response to comment.

F. Reliance on Commitments and State Rules Not Yet Adopted

Comment: Several commenters disagreed with the EPA's proposal to approve attainment demonstrations and rate-of-progress plans for the Springfield, Massachusetts, Greater Connecticut, and Metropolitan Washington, DC ozone nonattainment areas because not all of the emissions reductions credited in the demonstrations or plans are supported by legally enforceable limitations adopted and approved by the state or District and approved by the EPA as part of the SIP. Commenters also objected to accepting enforceable state commitments to adopt emission reduction control measures in the future in lieu of current adopted measures.

Response: The EPA has approved previously, or is approving together with the attainment demonstrations, all outstanding emission reduction limitations relied on for attainment for these three areas. Thus, none of the three areas on which the EPA is approving have commitments to adopt emission reduction measures in the future and all emission reductions rules relied on for attainment have been fully approved by the EPA.

G. Adequacy of Motor Vehicle Emissions Budgets

Comment: On our December 16, 1999 proposed approval of the Springfield area attainment demonstration, we received comments about the process and substance of EPA's review of the adequacy of motor vehicle emissions budgets for transportation conformity purposes. Specifically, one commenter stated that they opposed any action to determine adequate motor vehicle emissions budgets that are derived from attainment demonstrations that do not provide for attainment. The commenter listed a number of reasons why the submitted SIP contains an inadequate attainment demonstration. The commenter stated that EPA cannot find the motor vehicle emissions budgets adequate based on the record before EPA.

Response: At the time this comment was received, EPA's adequacy process for the Springfield, Massachusetts area had already been completed. EPA sent a letter to Massachusetts on February 19, 1999 finding the motor vehicle budgets submitted by the state on October 1, 1998 adequate for use in transportation conformity determinations. On June 10, 1999 (64 FR 31217), EPA notified the public that we had found the 2003 VOC and NO_x motor vehicle emission budgets submitted by Massachusetts on October 1, 1998 adequate for conformity purposes. These budgets became effective on February 19, 1999. Elsewhere in the Response to Comments, we have addressed all of the comments received on whether the submitted SIP contains an adequate attainment demonstration. Those include comments on the weight of evidence approach; the attainment date extension policy; the implementation of the 9% rate of progress requirements; credit for unapproved and unenforceable measures; credit from national rules; the acceptability of the fleet mix used in establishing budgets; and whether all reasonably available control measures have been implemented.

H. Rate of Progress Motor Vehicle Emissions Inventory

Comment: Several commenters stated that the motor vehicle emissions inventory is not current, particularly with respect to the fleet mix. Commenters stated that the fleet mix does not accurately reflect the growing proportion of sport utility vehicles and gasoline trucks, which pollute more than conventional cars. Also, a commenter stated that EPA and states

have not followed a consistent practice in updating SIP modeling to account for changes in vehicle fleets. For these reasons, commenters recommend disapproving the SIPs.

Response: The Massachusetts SIP we are taking final action on is based on the most recent vehicle registration data available at the time the SIP was submitted. The Massachusetts SIP is based on vehicle registration data from 1996, which is the most recent data available at the time the SIP was submitted. The SIP also contains vehicle fleet characteristics that are in the most recent periodic inventory update, which was submitted on November 9, 2000. EPA requires the most recent available data to be used, but we do not require it to be updated on a specific schedule. Therefore, different SIPs base their fleet mix on different years of data. Our guidance does not suggest that SIPs should be disapproved on this basis. Nevertheless, we do expect that revisions to these SIPs that are submitted using MOBILE6 (as required in those cases where the SIP is relying on emissions reductions from the Tier 2 standards) will use updated vehicle registration data appropriate for use with MOBILE6, whether it is updated local data or the updated national default data that will be part of MOBILE6.

I. VOC Emission Reductions

Comment: For States that need additional VOC reductions, this commenter recommends a process to achieve these VOC emission reductions, which involves the use of HFC-152a (1,1 difluoroethane) as the blowing agent in manufacturing of polystyrene foam products such as food trays and egg cartons. HFC-152a could be used instead of hydrocarbons, a known pollutant, as a blowing agent. Use of HFC-152a, which is classified as VOC exempt, would eliminate nationwide the entire 25,000 tons/year of VOC emissions from this industry.

Response: EPA has met with the commenter and has discussed the technology described by the company to reduce VOC emissions from polystyrene foam blowing through the use of HFC-152a (1,1 difluoroethane), which is a VOC exempt compound, as a blowing agent. Since the HFC-152a is VOC exempt, its use would give a VOC reduction compared to the use of VOCs such as pentane or butane as a blowing agent. However, EPA has not studied this technology exhaustively. It is each State's prerogative to specify which measures it will adopt in order to achieve the additional VOC reductions it needs. In evaluating the use of HFC-

152a, States may want to consider claims that products made with this blowing agent are comparable in quality to products made with other blowing agents. Also the question of the over-all long term environmental effect of encouraging emissions of fluorine compounds would be relevant to consider. This is a technology which States may want to consider, but ultimately, the decision of whether to require this particular technology to achieve the necessary VOC emissions reductions must be made by each affected State. Finally, EPA notes that under the significant new alternatives policy (SNAP) program, created under CAA section 612, EPA has identified acceptable foam blowing agents many of which are not VOCs (<http://www.epa.gov/ozone/title6/snap/>).

J. Credit for Measures Not Fully Implemented

Comment: States should not be given credit for measures that are not fully implemented. For example, the States are being given full credit for Federal coating, refinishing and consumer product rules that have been delayed or weakened.

Response: Architectural and Industrial Maintenance (AIM) Coatings: On March 22, 1995 EPA issued a memorandum¹⁴ that provided that States could claim a 20% reduction in VOC emissions from the AIM coatings category in ROP and attainment plans based on the anticipated promulgation of a national AIM coatings rule. In developing the attainment and ROP SIPs for their nonattainment areas, States relied on this memorandum to estimate emission reductions from the anticipated national AIM rule. EPA promulgated the final AIM rule in September 1998, codified at 40 CFR Part 59 Subpart D. In the preamble to EPA's final AIM coatings regulation, EPA estimated that the regulation will result in 20% reduction of nationwide VOC emissions from AIM coatings categories (63 FR 48855). The estimated VOC reductions from the final AIM rule resulted in the same level as those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, States have assumed a 20% reduction from AIM coatings source categories in their attainment and ROP plans. AIM coatings manufacturers were required to be in compliance with the final

¹⁴ "Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rules," March 22, 1995, from John S. Seitz, Director, Office of Air Quality Planning and Standards to Air Division Directors, Regions I-X.

regulation within one year of promulgation, except for certain pesticide formulations which were given an additional year to comply. Thus all manufacturers were required to comply, at the latest, by September 2000. Industry confirmed in comments on the proposed AIM rule that 12 months between the issuance of the final rule and the compliance deadline would be sufficient to "use up existing label stock" and "adjust inventories" to conform to the rule. 63 FR 48848 (September 11, 1998). In addition, EPA determined that, after the compliance date, the volume of nonconforming products would be very low (less than one percent) and would be withdrawn from retail shelves anyway. Therefore, EPA believes that compliant coatings were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

Autobody Refinish Coatings Rule: Massachusetts has adopted its own regulation for Autobody Refinish Coatings and is not relying on the federal rule for this category. EPA approved Massachusetts' automotive refinishing rule on February 14, 1996 (61 FR 5696). The state assumed a 40% control efficiency would be achieved from this rule. This is slightly higher than the amount of reduction estimated from EPA's final rule, "National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings," published on September 11, 1998 (63 FR 48806). EPA is now estimating a 36% reduction from the national rule for previously unregulated areas.

The slightly higher control efficiency for Massachusetts' rule is justified for two reasons. First, the Massachusetts rule contains standards requiring higher transfer efficiency for application equipment. These standards are not contained in the national rule, and will generate emission reductions not expected from the national rule. Second, the Massachusetts autobody rule does not include an exemption for laquer topcoats, like the national rule does. The Massachusetts rule includes an emission limit of 5.0 lbs VOC per gallon of coating for topcoats, generally, and a 5.2 lbs VOC per gallon of coating for three or four stage topcoats.

Consumer Products Rule: Consistent with a June 22, 1995 EPA guidance,¹⁵ States have claimed a 20% reduction from this source category based on EPA's proposed rule. The final rule, "National Volatile Organic Compound

Emission Standards for Consumer Products," (63 FR 48819), published on September 11, 1998, has resulted in a 20% reduction after the December 10, 1998 compliance date. In the consumer products rule, EPA determined and the consumer products industry concurred, that a significant proportion of subject products have been reformulated in response to State regulations and in anticipation of the final rule. 63 FR 48819. That is, industry reformulated the products covered by the consumer products rule in advance of the final rule. Therefore, EPA believes that complying products in accordance with the rule were in use by the Fall of 1999 and that it was appropriate for the States to take credit for those reductions in their SIPs.

K. Enforcement of Control Programs

Comment: The attainment demonstrations do not clearly set out programs for enforcement of the various control strategies relied on for emission reduction credit.

Response: State enforcement program elements are contained in SIP revisions previously approved by EPA under obligations for enforceable emission limitations set out in section 110 of the Clean Air Act. Once approved by the EPA, there is no need for states to readopt and resubmit their enforcement programs with each and every SIP revision generally required by other sections of the CAA.

L. Contingency Measures

Comment: The SIP for the Springfield, Massachusetts ozone nonattainment area does not provide contingency measures to make up for any emission reduction shortfall, either in achievement of ROP milestones or for failure to attain, as required by sections 172(c)(9) and 182(c)(9) of the Clean Air Act.

Response: The EPA believes the contingency measure requirements of Sections 172(c)(9) and 182(c)(9) are independent requirements from the attainment demonstration requirements under Sections 172(c)(1) and 182(c)(2)(A) and the rate-of-progress (ROP) requirements under §§ 172(c)(2) and 182(c)(2)(B). The contingency measure requirements are to address the event that an area fails to meet a ROP milestone or fails to attain the ozone NAAQS by the attainment date established in the SIP. The contingency measure requirements have no bearing on whether a state has submitted a SIP that projects attainment of the ozone NAAQS or the required ROP reductions toward attainment. The attainment or ROP SIP provides a demonstration that

attainment or ROP requirements ought to be fulfilled, but the contingency measure SIP requirements concern what is to happen only if attainment or ROP is not actually achieved. The EPA acknowledges that contingency measures are an independently required SIP revision, but does not believe that submission of contingency measures is necessary before EPA may approve an attainment or ROP SIP. Also see the discussion of contingency measures in the extension of the attainment date policy section VII.A.

The EPA has, however, examined the ROP and attainment SIPs for the Springfield Massachusetts nonattainment area. The following summarizes the EPA's findings for the Springfield Massachusetts area.

The post-1996 ROP and attainment demonstration SIP for Springfield, Massachusetts does not specify any specific measures as contingency measures. The EPA approved the post-1996 ROP plan on November 15, 2000. 65 FR 68896. Approval of the plan without contingency measures is appropriate as stated above. The EPA notes that there are surplus emission reductions from a number of programs which accrue reductions after 1999 and are beyond the 3 percent contingency measure requirement for ROP. The programs include: (1) The second phase of reformulated gasoline program, which started January 1, 2000; (2) continued implementation of the enhanced inspection and maintenance program, which started October 1, 1999 and isn't fully effective until four years later when two full cycles of vehicle testing have been completed; (3) continuing reductions from the California low emissions vehicle (LEV) program being implemented by Massachusetts; (4) continuing reductions from EPA's standards for a variety of off-road sources; and, (5) the NO_x SIP call adopted by Massachusetts, which has a May 1, 2003 compliance date.

The EPA notes that there are emission reduction measures that are not relied on or credited in the SIP for attainment which will continue to provide reductions after December 2003, the attainment date that EPA is approving for the area. They include the California low emissions vehicle 2 program adopted by Massachusetts which commences with reductions from medium-duty trucks in 2003 and from light-duty vehicles in 2004. Additionally, there are continuing reductions from EPA's standards for non-road sources.

The EPA has analyzed the SIP for Springfield, Massachusetts and has

¹⁵ "Regulatory Schedule for Consumer and Commercial Products under Section 183(e) of the Clean Air Act," June 22, 1995, John S. Seitz, Director OAQPS, to Air Division Directors, Regions I-X.

estimated that the area's attainment demonstration contingency obligation would be approximately 2.2 tpsd NO_x, and 1.5 tpsd VOC. Reductions from the federal non-road engine control program and the California LEV 2 program standards in 2004 are estimated to be at least 2.37 tpsd NO_x and 1.65 tpsd VOC which would cover the contingency obligation for this area by May 2005 (the year following the time by which EPA must determine whether the area has attained).¹⁶ More details on EPA's contingency measure analysis are included in the docket for the rulemaking action. While there is not an approved SIP contingency measure that would apply if the state failed to attain, EPA believes that existing federally enforceable measures would provide the necessary substantive relief.

M. NO_x Emissions Budget

Comment: Since Connecticut and Massachusetts are significant contributors to other States' ozone nonattainment, EPA should require Connecticut and Massachusetts to make necessary reductions to attain the ozone standard within their States and neighboring States. The commenter objected to allowing Connecticut to increase its NO_x emissions budget.

Response: The states of Connecticut, Massachusetts and Rhode Island all submitted their SIPs in response to the NO_x SIP call in late 1999, and EPA proposed approval of them all on July 12, 2000 (at 65 FR 42900, 65 FR 42907, and 65 FR 42913 for CT, MA and RI, respectively). No public comments were received on those proposals. On October 20, 2000, final approval of Connecticut, Massachusetts and Rhode Island NO_x SIP call SIPs was granted by EPA Region I's Regional Administrator. Approval of the SIPs will be codified at 40 CFR 52.370(c)(86) for Connecticut, 40 CFR 52.1120(c)(124) for Massachusetts, and Table C of 40 CFR 52.2070 for Rhode Island. In our final approval, we said that we have determined the SIP revisions for these three states meet the air quality objectives of the NO_x SIP call requirements EPA has published to date. Thus, we believe that Connecticut and Massachusetts have already adopted adequate emission control strategies to address 1-hour ozone transport for downwind areas. Furthermore, EPA has previously determined each of the 1-hour ozone nonattainment areas in eastern New England (i.e., Providence, Rhode Island;

Boston-Lawrence-Worcester, Massachusetts-New Hampshire; Portsmouth-Dover-Rochester, New Hampshire; Manchester, New Hampshire; Cheshire County, New Hampshire; Portland, Maine; Lewiston-Auburn, Maine, and Knox and Lincoln Counties, Maine) to have air quality meeting the 1-hour ozone standard. (See final actions published on June 5, 1998 (63 FR 31014), and June 9, 1999 (64 FR 30911).) Based on final data for some areas and preliminary data for others, EPA expects each of these areas to continue to be meeting the 1-hour ozone standard for the years 1998 through 2000.

Furthermore, in February 1999, CT, MA, RI, and EPA signed a memorandum of understanding (i.e., "the Three State MOU") agreeing to redistribute the EGU portions of the three states' budgets, as well as the compliance supplement pool allocations, amongst themselves. Under the MOU, the combined 2007 controlled emission level and compliance supplement pool did not change for the three states, only the individual state EGU allocations and supplement pools were redistributed to provide additional flexibility among these three states. EPA supports this concept because such a redistribution is no different than the effects of trading.

When EPA reviewed whether each state was meeting the objectives of the NO_x SIP call, we considered the adopted 2007 emission budgets and adopted NO_x reducing measures in CT, MA and RI together and found them as meeting the air quality objectives of the NO_x SIP Call. The issue of whether the redistribution was appropriate was considered and decided during the rulemaking approving the NO_x SIPs.

N. Lack of Fully Approved Rules

Comment: Springfield, MA, does not have final full approval of Stage II vapor recovery rules or enhanced I/M.

Response: EPA approved the Massachusetts enhanced inspection and maintenance SIP on November 16, 2000 (65 FR 69254). EPA approved the revised Stage II regulations on December 18, 2000 (65 FR 78974).

Other information and rationale for EPA's action are explained in the NPR and will not be restated here.

VIII. EPA Action

As described above, EPA does not believe any of the comments received on the proposals published for the attainment demonstration and attainment date extension for the Springfield, Massachusetts area change the basis for our proposed approval. Thus, EPA is approving the ground-

level one-hour ozone attainment demonstration SIP for the Springfield, Massachusetts ozone nonattainment area. EPA is also approving the attainment date extension for this area until December 31, 2003. This revision also approves the 2003 volatile organic compound and nitrogen oxide motor vehicle emissions budgets for the Springfield, Massachusetts serious ozone nonattainment area for use in transportation conformity.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any State implementation plan. Each request for revision to the State implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

IX. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

¹⁶ EPA policy provides that contingency measures should achieve a 3 percent reduction in emissions in the year following an EPA determination of a failure to attain or to meet a progress requirement.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This rule does not impose an information collection burden under the provisions of the

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 5, 2001. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of

such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: December 21, 2000.

Mindy S. Lubber,

Regional Administrator, EPA-New England.

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart W—Massachusetts

2. Section 52.1127 is amended by revising the table to read as follows:

§ 52.1127 Attainment dates for national standards.

* * * * *

Air quality control region	Pollutant					
	SO ₂		PM ₁₀	NO ₂	CO	O ₃
	Primary	Secondary				
AQCR 42: Hartford-New Haven-Springfield Interstate Area (See 40 CFR 81.26)						
All portions except City of Springfield	(a)	(b)	(a)	(a)	(a)	(e)
City of Springfield	(a)	(b)	(a)	(a)	(c)	(e)
AQCR 117: Berkshire Intrastate Area (See 40 CFR 81.141)	(a)	(b)	(a)	(a)	(a)	(e)
AQCR 118: Central Mass Intrastate Area (See 40 CFR 81.142)						
All portions except City of Worcester	(a)	(b)	(a)	(a)	(a)	(d)
City of Worcester	(a)	(b)	(a)	(a)	(c)	(d)
AQCR 119: Metropolitan Boston Intrastate Area (See 40 CFR 81.19)						
All portions except City of Waltham	(a)	(b)	(a)	(a)	(a)	(d)
City of Waltham	(a)	(b)	(a)	(a)	(c)	(d)
AQCR 120: Metropolitan Providence Interstate Area (See 40 CFR 81.31)	(a)	(b)	(a)	(a)	(a)	(d)
AQCR 121: Merrimack Valley-Southern NH Interstate Area (See 40 CFR 81.81)						
All portions except City of Lowell	(a)	(b)	(a)	(a)	(a)	(d)
City of Lowell	(a)	(b)	(a)	(a)	(c)	(d)

- a. Air quality levels presently below primary standards or area is unclassifiable.
b. Air quality levels presently below secondary standards or area is unclassifiable.
c. December 31, 1995.
d. November 15, 1999.
e. December 31, 2003.

3. Section 52.1129 of subpart W is amended by designating the existing text as paragraph (a) and by adding paragraph (b) to read as follows:

§ 52.1129 Control strategy: Ozone.

* * * * *

(b) Approval—Revisions to the State Implementation Plan submitted by the Massachusetts Department of Environmental Protection on July 27, 1998, October 1, 1998 and August 13, 1999. The revisions are for the purpose

of satisfying the attainment demonstration requirements of section 182(c)(2)(A) of the Clean Air Act, for the Springfield (Western Massachusetts) serious ozone nonattainment area. The revision establishes an attainment date

of December 31, 2003 for the Springfield, Massachusetts serious ozone nonattainment area. This revision establishes motor vehicle emissions budgets for 2003 of 23.77 tons per day

of volatile organic compounds (VOC) and 49.11 tons per day of nitrogen oxides (NO_x) to be used in transportation conformity in the

Springfield, Massachusetts serious ozone nonattainment area.
[FR Doc. 01-38 Filed 1-2-01; 8:45 am]
BILLING CODE 6560-50-P



Federal Register

**Wednesday,
January 3, 2001**

Part VIII

The President

**Executive Order 13184—Revocation of
Executive Order 12834**

Presidential Documents

Title 3—

Executive Order 13184 of December 28, 2000

The President

Revocation of Executive Order 12834

By the authority vested in me as President of the United States by the Constitution and laws of the United States of America, including section 301 of title 3, United States Code, and sections 3301 and 7301 of title 5, United States Code, it is hereby ordered as follows:

Executive Order 12834 of January 20, 1993, "Ethics Commitments by Executive Branch Appointees," is hereby revoked, effective at noon January 20, 2001. Employees and former employees subject to the commitments in Executive Order 12834 will not be subject to those commitments after the effective date of this order.



THE WHITE HOUSE,
December 28, 2000.



Federal Register

**Wednesday,
January 3, 2001**

Part IX

The President

**Executive Order 13185—To Strengthen
the Federal Government-University
Research Partnership**

**Proclamation 7389—To Extend
Nondiscriminatory Treatment (Normal
Trade Relations Treatment) to the
Products of the Republic of Georgia**

Presidential Documents

Title 3—

Executive Order 13185 of December 28, 2000

The President

To Strengthen the Federal Government-University Research Partnership

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to keep the Federal Government-University research partnership strong, it is hereby ordered as follows:

Section 1. *Principles of the Government-University Partnership.* The partnership in science and technology that has evolved between the Federal Government and American universities has yielded benefits that are vital to each. It continues to prove exceptionally productive, successfully promoting the discovery of knowledge, stimulating technological innovation, improving the quality of life, educating and training the next generation of scientists and engineers, and contributing to America's economic prosperity and national security. In order to reaffirm and strengthen this partnership, this order sets forth the following guiding and operating principles that are fully described in the April 1999 National Science and Technology Council report, "Renewing the Government-University Partnership." These principles shall provide the framework for the development and analysis of all future Federal policies, rules, and regulations for the Federal Government-University research partnership.

(a) The guiding principles that shall govern interactions between the Federal Government and universities that perform research are:

- (1) Research is an investment in the future;
- (2) The integration of research and education is vital;
- (3) Excellence is promoted when investments are guided by merit review; and
- (4) Research must be conducted with integrity.

(b) The operating principles that shall assist agencies, universities, individual researchers, and auditing and regulatory bodies in implementing the guiding principles are:

- (1) Agency cost-sharing policies and practices must be transparent;
- (2) Partners should respect the merit review process;
- (3) Agencies and universities should manage research in a cost-efficient manner;
- (4) Accountability and accounting are not the same;
- (5) The benefits of simplicity in policies and practices should be weighed against the costs;
- (6) Change should be justified by need and the process made transparent.

(c) Each executive branch department or agency that supports research at universities shall regularly review its existing policies and procedures to ensure that they meet the spirit and intent of the guiding and operating principles stated above.

Sec. 2. *Office of Science and Technology (OSTP) Review of the Government-University Research Partnership.* (a) The OSTP, in conjunction with the National Science and Technology Council, shall conduct a regular review of the Government-University research partnership and prepare a report on the status of the partnership. The OSTP should receive input from all departments or agencies that have a major impact on the Government-University partnership through their support of research and education, policy making, regulatory activities, and research administration. In addition, OSTP may seek the input of the National Science Board and the President's Committee of Advisors for Science and Technology, as well as other stakeholders, such as State and local governments, industry, the National Academy of Sciences, and the Federal Demonstration Partnership.

(b) The purpose of the review and the report is to determine the overall health of the Government-University research partnership, being mindful of the guiding and operating principles stated above. The report should include recommendations on how to improve the Government-University partnership.

(c) The Director of OSTP shall deliver the report to the President.

Sec. 3. *Judicial Review.* This order does not create any enforceable rights against the United States, its agencies, its officers, or any person.

A handwritten signature in black ink, reading "William Clinton". The signature is written in a cursive, flowing style with a large, prominent "W" and "C".

THE WHITE HOUSE,
December 28, 2000.

Presidential Documents

Proclamation 7389 of December 29, 2000

To Extend Nondiscriminatory Treatment (Normal Trade Relations Treatment) to the Products of the Republic of Georgia

By the President of the United States of America

A Proclamation

1. The Republic of Georgia (Georgia) has made progress, since its emergence from communism, toward democratic rule and the creation of a free market economy. Georgia has also made considerable progress toward respecting fundamental human rights consistent with the objectives of title IV of the Trade Act of 1974 (the "Trade Act") (19 U.S.C. 2431, *et seq.*). Further, I have found Georgia to be in full compliance with the freedom of emigration requirements under the Trade Act. In 1993, Georgia concluded a bilateral trade agreement with the United States and in 1994 concluded a bilateral investment treaty with the United States. Georgia acceded to the World Trade Organization (WTO) on June 14, 2000. The extension of unconditional normal trade relations treatment to the products of Georgia will permit the United States to avail itself of all rights under the WTO with respect to Georgia.

2. Pursuant to section 3002 of Public Law 106-476, 114 Stat. 2101, 2175, and having due regard for the findings of the Congress in section 3001 of that law, I hereby determine that title IV of the Trade Act should no longer apply to Georgia.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, acting under the authority vested in me by the Constitution and the laws of the United States, including but not limited to section 3002 of Public Law 106-476, do hereby proclaim that:

(1) Nondiscriminatory treatment (normal trade relations treatment) shall be extended to the products of Georgia; and

(2) The extension of nondiscriminatory treatment to the products of Georgia shall be effective as of the date of signature of this proclamation.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-ninth day of December, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fifth.



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Federal Register

Vol. 66, No. 2

Wednesday, January 3, 2001

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FEDERAL REGISTER PAGES AND DATE, JANUARY

1-226..... 2
227-704..... 3

CFR PARTS AFFECTED DURING JANUARY

At the end of each month, the Office of the Federal Register publishes separately a List of CFR Sections Affected (LSA), which lists parts and sections affected by documents published since the revision date of each title.

3 CFR	602.....280
Executive Orders:	Proposed Rules:
13184.....697	1.....66, 76, 315, 319
13185.....701	301.....77
Proclamations:	
7389.....703	30 CFR
Administrative Orders	Proposed Rules:
Presidential Determinations:	948.....335
No. 2001-05 of	
December 15,	33 CFR
2000.....223	66.....8
No. 2001-06 of	
December 15,	40 CFR
2000.....225	52.....8, 586, 634, 666
7 CFR	70.....16
905.....227	180.....296, 298
930.....229, 232	271.....22, 23, 28, 33
944.....227	Proposed Rules:
8 CFR	70.....84, 85
212.....235	271.....85, 86
9 CFR	413.....424
2.....236	433.....424
3.....239	438.....424
12 CFR	463.....424
225.....257, 400	464.....424
1501.....257	467.....424
Proposed Rules:	471.....424
225.....307	47 CFR
1501.....307	1.....33
14 CFR	90.....33
25.....261	Proposed Rules:
39.....1, 2, 5, 7, 263, 264, 265, 267	1.....86, 341
Proposed Rules:	2.....341
39.....57, 59, 61, 64	90.....86
20 CFR	49 CFR
Proposed Rules:	Proposed Rules:
369.....314	229.....136
24 CFR	567.....90
888.....162	591.....90
26 CFR	592.....90
1.....268, 279, 280	594.....90
	50 CFR
	635.....55
	Proposed Rules:
	17.....345
	648.....91

REMINDERS

The items in this list were editorially compiled as an aid to Federal Register users. Inclusion or exclusion from this list has no legal significance.

RULES GOING INTO EFFECT JANUARY 3, 2001**ENVIRONMENTAL PROTECTION AGENCY**

Pesticides; emergency exemptions, etc.:
Clopyralid; published 1-3-01
Pesticides; emergency exemptions, etc.:
Myclobutanil; published 1-3-01

**TREASURY DEPARTMENT
Internal Revenue Service**

Income taxes:
Credit for increasing research activities; published 1-3-01
Income subject to separate limitations and affiliated group interest and other expense allocation and apportionment and foreign tax credit limitation; published 1-3-01
Procedure and administration:
Attorney's fees and other costs based upon qualified offers; published 1-4-01

COMMENTS DUE NEXT WEEK**AGRICULTURE DEPARTMENT****Animal and Plant Health Inspection Service**

Exportation and importation of animals and animal products:

Horses, ruminants, swine, and dogs; inspection and treatment for screwworm; comments due by 1-12-01; published 11-13-00

User fees:

Veterinary services—
Permit applications; comments due by 1-12-01; published 11-13-00

AGRICULTURE DEPARTMENT**Food and Nutrition Service**

Child nutrition programs:

National school lunch and child and adult care food programs, State administrative expense

funds, and free and reduced price meals and free milk in schools—

Afterschool care programs; snacks reimbursement; comments due by 1-9-01; published 10-11-00

COMMERCE DEPARTMENT**National Institute of Standards and Technology**

National Voluntary Laboratory Accreditation Program; operating procedures; comments due by 1-8-01; published 11-7-00

COMMERCE DEPARTMENT**National Oceanic and Atmospheric Administration**

Fishery conservation and management:
Atlantic coastal fisheries—
American lobster; comments due by 1-9-01; published 11-28-00
Atlantic highly migratory species—
Pelagic longline fishery; sea turtle protection measures; comments due by 1-8-01; published 10-13-00
Northeastern United States fisheries—
Atlantic herring; comments due by 1-10-01; published 12-11-00
Ocean and coastal resource management:
Marine sanctuaries—
Florida Keys National Marine Sanctuary, FL; boundary expansion; comments due by 1-8-01; published 11-22-00

DEFENSE DEPARTMENT

Federal Acquisition Regulation (FAR):

Preference for U.S.-flag vessels; comments due by 1-8-01; published 11-7-00

ENVIRONMENTAL PROTECTION AGENCY

Air pollutants, hazardous; national emission standards:

Municipal solid waste landfills; comments due by 1-8-01; published 11-7-00

Air programs:

Outer Continental Shelf regulations—
California; consistency update; comments due by 1-10-01; published 12-11-00

Air quality implementation plans; approval and promulgation; various States:

Alabama; comments due by 1-8-01; published 12-8-00

Superfund program:

National oil and hazardous substances contingency plan—

National priorities list update; comments due by 1-8-01; published 12-8-00

Superrfund program:

National oil and hazardous substances contingency plan—

National priorities list update; comments due by 1-8-01; published 12-8-00

FEDERAL COMMUNICATIONS COMMISSION

Common carrier services:

Access charges—

Competitive local exchange carriers; tariff charge reform; comments due by 1-11-01; published 12-27-00

Satellite communications—

Fixed-Satellite Service (FSS) earth stations and terrestrial fixed service stations; efficient use and sharing of radio spectrum; comments due by 1-8-01; published 11-24-00

Telecommunications service quality reporting requirements; biennial regulatory review; comments due by 1-12-01; published 12-4-00

Radio stations; table of assignments:

Arizona; comments due by 1-8-01; published 11-29-00

Colorado; comments due by 1-8-01; published 12-18-00

Oregon; comments due by 1-8-01; published 11-29-00

Wisconsin; comments due by 1-8-01; published 11-30-00

GENERAL SERVICES ADMINISTRATION

Federal Acquisition Regulation (FAR):

Preference for U.S.-flag vessels; comments due by 1-8-01; published 11-7-00

HEALTH AND HUMAN SERVICES DEPARTMENT**Health Care Financing Administration**

Medicare:

Hospital outpatient services; prospective payment

system; comments due by 1-12-01; published 11-13-00

HOUSING AND URBAN DEVELOPMENT DEPARTMENT

Fair housing:

Fair Housing Act violations; sexual harassment cases; comments due by 1-12-01; published 11-13-00

INTERIOR DEPARTMENT**Fish and Wildlife Service**

Endangered and threatened species

Critical habitat designations—

Various plants from Kauai and Niihau, HI; comments due by 1-8-01; published 11-7-00

Various plants from Kauai and Niihau, HI; correction; comments due by 1-8-01; published 11-13-00

Endangered and threatened species:

Scotts Valley polygonum; comments due by 1-8-01; published 11-9-00

INTERIOR DEPARTMENT**Minerals Management Service**

Royalty management:

Rate relief or reduction; deep water royalty relief for post-2000 OCS oil and gas leases; comments due by 1-9-01; published 12-15-00

JUSTICE DEPARTMENT**Prisons Bureau**

Inmate control, custody, care, etc.:

Suicide prevention program; comments due by 1-12-01; published 11-13-00

LEGAL SERVICES CORPORATION

Regulations review; comment request; comments due by 1-8-01; published 11-24-00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Federal Acquisition Regulation (FAR):

Preference for U.S.-flag vessels; comments due by 1-8-01; published 11-7-00

NUCLEAR REGULATORY COMMISSION

Spent nuclear fuel and high-level radioactive waste; independent storage; licensing requirements:

Approved spent fuel storage casks; list; comments due

by 1-8-01; published 12-7-00

SMALL BUSINESS ADMINISTRATION

Small business size standards:
8(a) business development/
small disadvantaged
business status
determinations; comments
due by 1-8-01; published
11-8-00

TRANSPORTATION DEPARTMENT

Coast Guard

Drawbridge operations:
Massachusetts; comments
due by 1-8-01; published
11-8-00

TRANSPORTATION DEPARTMENT

Federal Aviation Administration

Airworthiness directives:
Boeing; comments due by
1-8-01; published 11-7-00
Empresa Brasileira de
Aeronautica S.A.;
comments due by 1-8-01;
published 12-8-00
Fairchild; comments due by
1-11-01; published 12-5-00
McDonnell Douglas;
comments due by 1-11-01;
published 11-7-00
Robinson Helicopter Co.;
comments due by 1-8-01;
published 11-7-00
Special conditions—
Sikorsky Aircraft Corp.
Model S-92 helicopters;
comments due by 1-12-01;
published 11-28-00
Airworthiness standards:
Special conditions—
Eurocopter France Model
EC-155 helicopters;
comments due by 1-12-01;
published 11-28-00
Class D airspace; comments
due by 1-12-01; published
11-28-00
Class D and Class E
airspace; comments due by
1-12-01; published 11-28-00

TRANSPORTATION DEPARTMENT

National Highway Traffic Safety Administration

Motor vehicle safety
standards:

Fuel system integrity;
comments due by 1-12-01;
published 11-13-00

TREASURY DEPARTMENT

Alcohol, Tobacco and Firearms Bureau

Firearms:

Commerce in explosives—
Imported explosive
materials; identification
markings; comments
due by 1-12-01;
published 11-13-00

TREASURY DEPARTMENT

Fiscal Service

Financial management
services:
Federal-State funds
transfers; rules and
procedures; comments
due by 1-10-01; published
10-12-00

TREASURY DEPARTMENT

Internal Revenue Service

Income Taxes:
Corporations; liability
assumption in certain
corporate transactions;
comments due by 1-10-01;
published 1-4-01
Income taxes:
Principal residence sale or
exchange; exclusion of
gain; comments due by 1-8-01;
published 10-10-00
Procedure and administration:
Pension and employee
benefit trusts, and other
trusts; classification;
comments due by 1-10-01;
published 10-12-00

LIST OF PUBLIC LAWS

This completes the listing of public laws enacted during the second session of the 106th Congress. It may be used in conjunction with "PLUS" (Public Laws Update Service) on 202-523-6641. This list is also available online at <http://www.nara.gov/fedreg>.

The text of laws is not published in the **Federal Register** but may be ordered in "slip law" (individual pamphlet) form from the

Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (phone, 202-512-1808). The text will also be made available on the Internet from GPO Access at <http://www.access.gpo.gov/nara/index.html>. Some laws may not yet be available.

The list will resume when bills are enacted into public law during the next session of Congress. A cumulative list of Public Laws will be published in the **Federal Register** on Tuesday, January 16, 2001.

H.R. 5528/P.L. 106-568

Omnibus Indian Advancement Act (Dec. 27, 2000; 114 Stat. 2868)

H.R. 5640/P.L. 106-569

American Homeownership and Economic Opportunity Act of 2000 (Dec. 27, 2000; 114 Stat. 2944)

S. 2943/P.L. 106-570

Assistance for International Malaria Control Act (Dec. 27, 2000; 114 Stat. 3038)

H.R. 207/P.L. 106-571

Federal Physicians Comparability Allowance Amendments of 2000 (Dec. 28, 2000; 114 Stat. 3054)

H.R. 2816/P.L. 106-572

Computer Crime Enforcement Act (Dec. 28, 2000; 114 Stat. 3058)

H.R. 3594/P.L. 106-573

Installment Tax Correction Act of 2000 (Dec. 28, 2000; 114 Stat. 3061)

H.R. 4020/P.L. 106-574

To authorize the addition of land to Sequoia National Park, and for other purposes. (Dec. 28, 2000; 114 Stat. 3062)

H.R. 4656/P.L. 106-575

To authorize the Forest Service to convey certain lands in the Lake Tahoe Basin to the Washoe County School District for use as an elementary school site. (Dec. 28, 2000; 114 Stat. 3063)

S. 1761/P.L. 106-576

Lower Rio Grande Valley Water Resources Conservation

and Improvement Act of 2000 (Dec. 28, 2000; 114 Stat. 3065)

S. 2749/P.L. 106-577

To establish the California Trail Interpretive Center in Elko, Nevada, to facilitate the interpretation of the history of development and use of trails in the settling of the western portion of the United States, and for other purposes. (Dec. 28, 2000; 114 Stat. 3068)

S. 2924/P.L. 106-578

Internet False Identification Prevention Act of 2000 (Dec. 28, 2000; 114 Stat. 3075)

S. 3181/P.L. 106-579

National Moment of Remembrance Act (Dec. 28, 2000; 114 Stat. 3078)

H.R. 1795/P.L. 106-580

National Institute of Biomedical Imaging and Bioengineering Establishment Act (Dec. 29, 2000; 114 Stat. 3088)

Last List December 29, 2000

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